



USMLE Step 3 Sample Test Questions

A Joint Program of the Federation of State Medical Boards of the United States, Inc., and the National Board of Medical Examiners $^{\rm \tiny B}$





This booklet updated November 2015.

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USMLE Step 3 Multiple Choice Test Question Formats

The following are strategies for answering one-best-answer questions (eg, Single Items, Multiple Item Sets, and Sequential Item Sets):

- Read each patient vignette and question carefully. It is important to understand what is being asked.
- Try to generate an answer and then look for it in the option list.
- Alternatively, read each option carefully, eliminating those that are clearly incorrect. Of the remaining options, select the one that is most correct.
- If unsure about an answer, it is better to guess since unanswered questions are automatically counted as wrong answers.

Single Item Questions

A single patient-centered vignette is associated with one question followed by four or more response options. The response options for all questions are lettered (ie, A, B, C, D, E). You are required to select the best answer to the question. Other options may be partially correct, but there is only ONE BEST answer. This is the traditional, most frequently used multiple-choice question format on the examination.

Example Question 1

- 1. A 30-year-old man comes to the emergency department because of an acute episode of renal colic. Medical history is remarkable for episodes of painful urination and passing of what he calls "gravel in my urine." Urinalysis demonstrates microscopic hematuria with some crystalluria and no casts. Supine x-ray of the abdomen shows no abnormalities. A 4-mm renal calculus is detected in the distal right ureter on ultrasonography. There is no evidence of dilation of the collecting system. The patient's pain is responsive to narcotic medication. In addition to administering intravenous fluids, which of the following is the most appropriate next step?
 - A. Acidification of urine by drinking cranberry juice
 - B. Cystoscopic removal of the calculus
 - C. Cystoscopic ureteral lavage
 - D. Shock wave lithotripsy
 - E. Straining of the urine
 - (Answer: E)

Multiple Item Sets

A single patient-centered vignette may be associated with two or three consecutive questions about the information presented. Each question within these sets is associated with the patient vignette and is independent of the other question(s) in the set. The items within this type of format are designed to be answered in any order. You are required to select the ONE BEST answer to each question.

Example Questions 2 to 3

A 52-year-old man returns to the office for reevaluation of an ulcer on his right great toe. The patient has a 15-year history of diabetes mellitus and takes glipizide and rosiglitazone. He first noticed the ulcer 2 months ago. One month ago, a 14-day course of oral amoxicillin-clavulanate therapy was prescribed. He has smoked one pack of cigarettes daily for the past 37 years. He is 178 cm (5 ft 10 in) tall and weighs 102 kg (225 lb); BMI is 32 kg/m². Today, vital signs are temperature 38.8°C (101.8°F), pulse 96/min, respirations 12/min, and blood pressure 130/85 mm Hg. Physical examination of the right great toe discloses a 1.5-cm nontender ulcer with a depth of 0.5 cm, a moist base, yellow exudate, and surrounding erythema to the level of the malleoli. Vibration sense and sensation to monofilament examination are absent. Pulses are diminished in both feet. Capillary refill time is 2 seconds in the right great toe. Urinalysis discloses 3+ protein.

- 2. Which of the following historical factors or physical examination findings is most strongly associated with development of this patient's foot ulcer?
 - A. Diminished pedal pulses
 B. Neurologic findings
 C. The patient's weight
 D. Proteinuria
 E. Tobacco use
 (Answer: B)
- 3. Which of the following is the most appropriate action at this time?
 - A. Begin aggressive debridement in the office
 - B. Begin intravenous antibiotic therapy
 - C. Refer the patient for transmetatarsal amputation
 - D. Schedule the patient for a third-degree skin graft
 - E. Switch the amoxicillin-clavulanate to oral ciprofloxacin

(Answer: B)

Sequential Item Sets

A single patient-centered vignette may be associated with two or three consecutive questions about the information presented. Each question is associated with the initial patient vignette but is testing a different point. You are required to select the ONE BEST answer to each question. Questions are designed to be answered in sequential order. You must click "Proceed to Next Item" to view the next item in the set; once you click on this button, you will not be able to add or change an answer to the displayed (previous) item.

Example Questions 4 to 5

A 2-year-old girl is brought to the office by her mother for evaluation of fever. You have been the girl's physician since birth. While in the office, the girl stiffens and then has bilateral, symmetrical shaking of her upper and lower extremities; she becomes mildly cyanotic. The episode lasts for approximately 45 seconds, after which she becomes relaxed and appears to fall asleep. Vital signs at this time are temperature 40.0° C (104.0° F), pulse 120/min, and respirations 40/min. On physical examination she has a generally pink complexion and flushed cheeks. She is limp and somnolent and responds with a cry to noxious stimulus. Tympanic membranes are inflamed bilaterally, nose has a scant, clear discharge, and throat is mildly erythematous. Lungs are clear to auscultation except for transmitted upper airway sounds. Heart has rapid rate with a grade 1/6 systolic murmur at the left sternal border. Complete blood count, blood culture, lumbar puncture, and catheterized urine specimen are obtained and sent for stat analysis. Acetaminophen is administered by rectal suppository. Thirty minutes later the patient awakens and is smiling. She is afebrile. Additional history discloses that she was born at term, she had an uneventful neonatal course, she has normal growth and development, and vaccinations are up-to-date. She has never had an episode similar to this. Initial laboratory results are shown:

Blood	
WBC	$10,400/\text{mm}^3$
Neutrophils, segmented	25%
Neutrophils, bands	5%
Lymphocytes	65%
Monocytes	5%
Cerebrospinal fluid	0 RBC/mm^3
Urinalysis	Normal

Other laboratory studies are pending.

4. In addition to ampicillin for otitis media and acetaminophen, this child also should receive which of the following?

A. Oral ethosuximide
B. Oral phenobarbital
C. Oral phenytoin
D. Rectal diazepam
E. No additional medications (*Answer E*)

5. Two weeks later the patient is brought to the office for a follow-up visit. Her mother says that she is doing well and she has had no recurrence of her symptoms. Examination of the ears shows resolution of the otitis media. Which of the following is the most important diagnostic step at this time?

A. Audiology testing
B. Cognitive testing
C. CT scan of the head
D. EEG
E. No additional testing (*Answer E*)

Introduction to USMLE Step 3 Sample Test Questions

The following pages include 70 sample test questions. Please note that reviewing the sample questions is not a substitute for acquainting yourself with the test software. You should run the Step 3 tutorial and practice test items that are provided on the USMLE website well before your test date. The sample materials on the USMLE website include additional items that do not appear in this booklet: pharmaceutical ads and abstracts, items with associated audio or video findings, and sequential item sets. You should become familiar with these formats as they will be used in the actual examination.

In addition, the computer-based case simulation (CCS) format you will see on an actual Step 3 examination is not represented in this booklet. You must become familiar with the CCS format by reading information available in the USMLE Content Description and General Information booklet and by practicing with sample CCS cases before you take the Step 3 examination; the information and the practice materials are available on the USMLE website.

These sample questions are illustrative of the types of questions used in the Step 3 examination. Although the questions exemplify content on the examination, they may not reflect the content coverage on individual examinations. Questions are grouped together by the content appropriate for each examination day in the same manner as in the actual computeradministered test blocks. In the actual examination, the questions will be presented one at a time in a format designed for easy on-screen reading, including use of exhibit buttons (separate windows) for the table of normal Laboratory Values (included here on pages 6–7) and some pictorials. Photographs, charts, and x-rays referred to in this booklet are not of the same quality as the pictorials used in the actual examination. In addition, you will have the capability to adjust the brightness and contrast of pictorials on the computer screen.

To take the following sample test questions as they would be timed in the actual examination, you should allow a maximum of 1 hour for the 40-item block, and a maximum of 45 minutes for the 30-item block, for a total of 1 hour 45 minutes. Please be aware that most examinees perceive the time pressure to be greater during an actual examination. An answer form for recording answers is provided on page 8. An answer key is provided on page 36. In the actual examination, answers will be selected on the screen; **no answer form will be provided**.

USMLE STEP 3 NORMAL LABORATORY VALUES

	* Included in the Biochemical Profile	
BLOOD, PLASMA, SERUM	REFERENCE RANGE	SI REFERENCE INTERVALS
* Alanine aminotransferase (ALT), serum	10-40 U/L	10-40 U/L
* Alkaline phosphatase, serum	Male: 30-100 U/L	Male: 30-100 U/L
	Female: 45-115 U/L	Female: 45-115 U/L
Amylase, serum	25-125 U/L	25-125 U/L
* Aspartate aminotransferase (AST), serum	15-40 U/L	15-40 U/L
* Bilirubin, serum (adult), total // direct	0.1-1.0 mg/dL // 0.0-0.3 mg/dL	2-17 µmol/L // 0-5 µmol/L
Calcium, serum (total)	8.4-10.2 mg/dL	2.1-2.8 mmol/L
* Cholesterol, serum		
Total	150-240 mg/dI	3.9-6.2 mmol/L
HDL	30-70 mg/dL	0.8-1.8 mmol/L
IDL	<160 mg/dI	< 4.2 mmol/L
Cortisol serum	8.00 AM: 5-23 µg/dL // 4.00 PM: 3-15 µg/dL	138-635 nmol/I // 82-413 nmol/I
	8.00 pm; # 50% of 8.00 am	Errotion of 8:00 AM: # 0.50
Creating kingsa satum	Male: 25 00 U/J	25 00 U/I
Cleaune kinase, seluin	Male. 23-90 U/L	23-90 0/L 10 70 U/L
* Constitution comme	$\begin{array}{c} \text{Female: } 10\text{-}70 \text{ U/L} \\ \text{O} (1.2 \text{ ms/d}) \end{array}$	10-70 U/L 52 10(
* Creatinine, serum	0.6-1.2 mg/dL	53-106 µmol/L
Electrolytes, serum		105 146 15
* Sodium (Na ⁺)	135-146 mEq/L	135-146 mmol/L
* Potassium (K^{+})	3.5-5.0 mEq/L	3.5-5.0 mmol/L
* Chloride (Cl ⁻)	95-105 mEq/L	95-105 mmol/L
* Bicarbonate (HCO ₃ ⁻)	22-28 mEq/L	22-28 mmol/L
Magnesium (Mg ²⁺)	1.5-2.0 mEq/L	1.5-2.0 mmol/L
Ferritin, serum	Male: 15-200 ng/mL	15-200 μg/L
	Female: 12-150 ng/mL	12-150 μg/L
Follicle-stimulating hormone, serum/plasma	Male: 4-25 mIU/mL	4-25 U/L
	Female: premenopause 4-30 mIU/mL	4-30 U/L
	midcycle peak 10-90 mIU/mL	10-90 U/L
	postmenopause 40-250 mIU/mL	40-250 U/L
Gases, arterial blood (room air)		
PO ₂	75-105 mm Hg	10.0-14.0 kPa
PCO ₂	33-45 mm Hg	4.4-5.9 kPa
pH	7.35-7.45	$[H^+]$ 36-44 nmol/L
* Glucose serum	Fasting: 70-110 mg/dL	3.8-6.1 mmol/L
	2-h postprandial: $< 120 \text{ mg/dL}$	< 6.6 mmol/L
Immunoglobulins serum		
ΙσΔ	76-390 mg/dI	0 76-3 90 g/I
Igr Internet in the second sec	0-380 III/mI	0.380 1111/1
IgE	650 1500 mg/dI	6 5 15 g/l
IgO	40.245 mg/dI	0.3 - 15 g/L
Igivi	40-343 mg/uL	0.4-3.45 g/L
	50-170 μg/uL	9-50 µmol/L
Lactate denydrogenase, serum	45-90 U/L	45-90 U/L
Luteinizing hormone, serum/plasma	Male: $6-23 \text{ mIU/mL}$	6-23 U/L
	Female: follicular phase 5-30 mIU/mL	5-30 U/L
	midcycle 75-150 mIU/mL	75-150 U/L
	postmenopause 30-200 mIU/mL	30-200 U/L
Osmolality, serum	275-295 mOsmol/kg H ₂ O	275-295 mOsmol/kg H ₂ O
Phosphorus (inorganic), serum	3.0-4.5 mg/dL	1.0-1.5 mmol/L
Proteins, serum		
Total (recumbent)	6.0-7.8 g/dL	60-78 g/L
Albumin	3.5-5.5 g/dL	35-55 g/L
Globulin	2.3-3.5 g/dL	23-35 g/L
Thyroid-stimulating hormone (TSH), serum	0.5-5.0 μU/mL	0.5-5.0 mU/L
Thyroxine (T ₄), serum	5-12 μg/dL	64-155 nmol/L
Triglycerides	35-160 mg/dL	0.4-1.81 mmol/L
Triiodothyronine (T ₃) resin uptake	25%-35%	0.25-0.35
* Urea nitrogen, serum	7-18 mg/dL	1.2-3.0 mmol/L
Uric acid. serum	3.0-8.2 mg/dL	0.18-0.48 mmol/L
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LABORATORY VALUES (continued)

CEREBROSPINAL FLUID	REFERENCE RANGE	SI REFERENCE INTERVALS
Cell count	0-5/mm ³	0-5 x 10 ⁶ /L
Chloride	118-132 mEq/L	118-132 mmol/L
Gamma globulin	3%-12% total proteins	0.03-0.12
Glucose	40-70 mg/dL	2.2-3.9 mmol/L
Pressure	70-180 mm H ₂ O	70-180 mm H ₂ O
Proteins, total	$<40\ mg/dL$	< 0.40 g/L
HEMATOL OCIC		
Bleeding time (template)	2.7 minutes	2.7 minutes
CD4 cell count	$> 500/mm^3$	2-7 minutes
Erythroaute count	> 300/11111	$4.2.5.0 = 10^{12}$ //
	Male: 4.3-5.9 million/mm	$4.5-5.9 \times 10^{-12}$
Employee and an dimension mate (Westerner)	Female: 3.5-5.5 million/mm	3.5-5.5 X 10 /L
Erythrocyte sedimentation rate (westergren)	Male: 0-15 mm/n	0-15 mm/n
11	Female: 0-20 mm/n	0-20 mm/n
Нетаюсти	Male: 41%-55%	0.41-0.55
TT 11.11	Female: 36%-46%	0.36-0.46
Hemoglobin, blood	Male: 13.5-17.5 g/dL	2.09-2.71 mmol/L
	Female: 12.0-16.0 g/dL	1.86-2.48 mmol/L
Hemoglobin A _{lc}	# 6%	# 0.06%
Leukocyte count and differential	3	0
Leukocyte count	4500-11,000/mm ³	4.5-11.0 x 10 [°] /L
Neutrophils, segmented	54%-62%	0.54-0.62
Neutrophils, band	3%-5%	0.03-0.05
Eosinophils	1%-3%	0.01-0.03
Basophils	0%-0.75%	0-0.0075
Lymphocytes	25%-33%	0.25-0.33
Monocytes	3%-7%	0.03-0.07
Mean corpuscular hemoglobin (MCH)	25-35 pg/cell	0.39-0.54 fmol/cell
Mean corpuscular hemoglobin		
concentration (MCHC)	31%-36% Hb/cell	4.81-5.58 mmol Hb/L
Mean corpuscular volume (MCV)	80-100 μm ³	80-100 fL
Partial thromboplastin time (activated)	< 28 seconds	< 28 seconds
Platelet count	150,000-400,000/mm ³	150-400 x 10 ⁹ /L
Prothrombin time	< 12 seconds	< 12 seconds
Reticulocyte count	0.5%-1.5%	0.005-0.015
Volume		
Plasma	Male: 25-43 mL/kg	0.025-0.043 L/kg
	Female: 28-45 mL/kg	0.028-0.045 L/kg
Red cell	Male: 20-36 mL/kg	0.020-0.036 L/kg
	Female: 19-31 mL/kg	0.019-0.031 L/kg
URINE		
Calcium	100-300 mg/24 h	2.5-7.5 mmol/24 h
Creatinine clearance	Male: 97-137 mI /min	2.5 7.5 million 24 li
	Female: 88-128 mL/min	
Osmolality	50-1400 mOsmol/kg HaO	
Ovalate	8-40 μα/mI	90-445 umol/I
Proteins total	< 150 mg/24 h	< 0.15 g/24 h
1 1001115, 101a1	< 150 mg/24 n	< 0.1 <i>5 g/2</i> 4 II
BODY MASS INDEX	Rec=19-25 kg/m ²	

Answer Form for Step 3 Sample Questions

Block 1: FIP

1	9	17	25	33
2	10	18	26	34
3	11	19	27	35
4	12	20	28	36
5	13	21	29	37
6	14	22	30	38
7	15	23	31	39
8	16	24	32	40

Block 2: ACM

41	47	53	59	65
42	48	54	60	66
43	49	55	61	67
44	50	56	62	68
45	51	57	63	69
46	52	58	64	70

Sample Step 3 Questions

GENERAL INSTRUCTIONS: Read each question carefully and in the order in which it is presented. Then select the one best response option of the choices offered. There may be 4 to 6 response options. More than one option may be partially correct. You must select the **ONE BEST** answer and fill in the corresponding blank line on the answer sheet.

Some items are grouped together around a clinical vignette as a set or case; be particularly careful to read and answer these cases or sets of items in the order they are presented.

The items in this exam are divided into blocks according to the day they will appear on the actual Step 3 examination. The first day of the Step 3 examination is referred to as Foundations of Independent Practice (FIP), and the second day is referred to as Advanced Clinical Medicine (ACM).

Block 1: Foundations of Independent Practice (FIP)	Items 1–40
Block 2: Advanced Clinical Medicine (ACM)	Items 41–70

Block 1: FIP

Items 1–40; Time - 1 hour

ALL ITEMS REQUIRE SELECTION OF ONE BEST CHOICE.

1. A 67-year-old African American man with bronchogenic carcinoma returns to the office for follow-up of confusion and lethargy that have been gradually increasing during the past 3 weeks. CT scan of the head 4 weeks ago showed no metastases. Current medications include inhaled bronchodilator medication and oxycodone for pain. The patient is 185 cm (6 ft 1 in) tall and weighs 61 kg (135 lb); BMI is 18 kg/m². Vital signs are normal. Physical examination shows generalized muscle wasting. Auscultation of the lungs discloses scattered rhonchi in all fields and expiratory wheezes. Mini-Mental State Examination score is 24/30. Results of laboratory studies are shown:

Serum	
Na ⁺	125 mEq/L
\mathbf{K}^+	3.2 mEq/L
Cl	100 mEq/L
HCO_3^-	25 mEq/L
Blood	
Hematocrit	32.2%
Hemoglobin	11.2 g/dL

Which of the following is the most appropriate study to order at this time?

- (A) 24-Hour urine collection for creatinine clearance
- (B) Determination of AM serum cortisol concentration
- (C) Determination of serum iron concentration
- (D) Determination of serum magnesium concentration
- (E) Determination of urine sodium concentration

2. A 60-year-old man is admitted to the hospital for management of acute pancreatitis. Results of laboratory studies are shown:

Serum		Blood	
Amylase	1000 U/L	Hematocrit	42%
Calcium	8.4 mg/dL	WBC	$14,000/\text{mm}^3$
Urea nitrogen	5 mg/dL		

Results of serum liver chemistry profile are within the reference ranges. After 48 hours of fluid therapy and observation, a poor prognosis would be indicated by which of the following laboratory study results?

- (A) Serum alanine aminotransferase (ALT) concentration of 106 U/L
- (B) Serum amylase concentration of 2000 U/L
- (C) Serum bilirubin concentration of 4.2 mg/dL
- (D) Serum calcium concentration of 6.6 mg/dL
- (E) Serum glucose concentration of 200 mg/dL
- 3. A 2-year-old boy is brought to the office by his mother for follow-up of a chromosome analysis done 1 month ago. The child has minor dysmorphic features, and growth and developmental delay. Chromosome analysis showed a small unbalanced chromosome translocation, with extra chromosomal material at the tip of chromosome 3. The cytogenetics laboratory requested blood samples from both parents for follow-up studies. The parents are divorced, and the mother has custody of the child. The relationship between the parents is hostile. The mother has been tested and has normal chromosomes without evidence of translocation. At today's visit, she reacts angrily when the issue of contacting the child's father for testing is raised. She states that he abandoned them and that he has no interest in his child. She refuses to cooperate in contacting the father, who could be a translocation carrier. You do not know the father, but an office worker told you that he lives in a nearby town. The mother says that he is living with a new girlfriend. Which of the following is the most appropriate next step?
 - (A) Attempt to identify the father's physician and work with that physician to obtain chromosome studies on the father
 - (B) Contact the father by telephone and arrange for him to give a blood sample at a local hospital
 - (C) Document your attempts to work with the mother but proceed no further, since you have no physician-patient relationship with the father
 - (D) Help the mother deal with her anger and educate her regarding the potential benefit to her son and others if the father's chromosome studies are done
 - (E) Send the father a letter (expressing few details about the patient) and suggest that he contact your office for an appointment and further discussion of his child
- 4. A 32-year-old woman comes to the office 8 months after her husband was killed in a motor vehicle collision. Since that time, she has had a decreased appetite and difficulty falling asleep. She states that she is often sad and cries frequently. She also has been rechecking the door lock five times before leaving her house and has to count exactly five pieces of toilet paper before she uses it. She says that she has always been a perfectionist but these urges and rituals are new. Medical history is unremarkable and she takes no medications. Pharmacotherapy should be targeted to which of the following neurotransmitters?
 - (A) Acetylcholine
 - (B) Dopamine
 - (C) Glutamate
 - (D) Norepinephrine
 - (E) Serotonin

5. A 62-year-old white woman is scheduled to undergo an operation for pancreatic cancer in 24 hours. The surgeon asks for your recommendations regarding postoperative nutrition. You recently read a study from the medical literature comparing enteral feeding with parenteral feeding in similar patients undergoing surgery for malignancies. The patients were randomly assigned to enteral or parenteral feeding beginning 6 hours after surgery and continuing for 7 days. The primary outcomes were infectious complications and length of stay. In the enteral group, 66% of patients had no early adverse effects; 11% could not tolerate the feedings and were changed to parenteral nutrition.

Effect of Postoperative Nutrition on Complications and Duration of Hospital Stay				
Outcome	Enteral	Parenteral	p value	
Percentage of patients with complication	23%	28%	>0.05	
Length of stay (days)	19.2±7.9	21.6±8.9	>0.05	

On the basis of these data, which of the following is the most appropriate method for this patient's postoperative nutrition?

- (A) Enteral feedings because of the decrease in complications
- (B) Enteral feedings because of the shorter length of hospital stay
- (C) Parenteral feedings because 1 in 10 patients fed enterally will require changing to parenteral nutrition
- (D) Parenteral feedings because of the high incidence of early adverse effects in the enteral groups
- (E) Either therapy is equally efficacious
- 6. A 62-year-old woman is brought to the emergency department because of obtundation. On physical examination, she has hypotension and tachycardia. Respirations are 24/min. She has cherry-red maculae on funduscopic examination. Results of initial laboratory studies are shown:

Serum		Urine	
Urea nitrogen	37 mg/dL	Color	Clear
Na^+	139 mEq/L	Specific gravity	1.010
\mathbf{K}^+	6.1 mEq/L	Glucose	Negative
Cl^{-}	100 mEq/L	Proteins, total	2+
HCO_3^-	10 mEq/L	Ketones	Trace
Glucose	121 mg/dL	WBC	5–10/hpf
Osmolality	357 mOsmol/kg H ₂ O	RBC	3–5/hpf
Arterial blood gas analy	sis on room air	Crystals	None
Po ₂	75 mm Hg	Casts	Rare epithelial cell casts
Pco_2	26 mm Hg		
pН	7.09		
HCO_3^-	9 mEq/L		

Which of the following is the most likely explanation for these data?

- (A) Alcoholic ketoacidosis
- (B) Diabetic ketoacidosis
- (C) Isopropyl alcohol intoxication
- (D) Methanol intoxication
- (E) Salicylate intoxication



A 38-year-old Hispanic bank executive comes to the emergency department because of the sudden onset of shortness of breath, light-headedness, diaphoresis, and weakness. He is afebrile. On auscultation of the lungs, bilateral basilar crackles are heard. ECG is shown. Which of the following is the most likely diagnosis?

- (A) Acute pericarditis
- (B) Hyperventilation syndrome
- (C) Myocardial infarction
- (D) Pulmonary embolism
- (E) Spontaneous pneumothorax
- 8. A 15-year-old boy is brought to the office by his mother because he has been tired and irritable for the past 3 months. He is a high school freshman and a member of the track team. He reports that his symptoms began shortly after starting spring training. He practices sprints 5 nights a week and runs 2 to 5 miles several days a week in addition to leg training with weights. He admits to being tired and says the training is becoming more intense and that he is a little concerned about his ability to continue on the team. His appetite has been unchanged. Medical history is unremarkable and he takes no medications. He has been your patient for the past 3 years. He seems more sullen than you remember from previous visits. You ask his mother to leave the examining room while you complete the physical examination. After she leaves the room, he admits that he is worried about some lumps in his groin. It is most appropriate to obtain additional history regarding which of the following?
 - (A) Details of his weight training
 - (B) Fever and chills
 - (C) Mood symptoms
 - (D) School performance
 - (E) Sexual activity

Items 9-10

A 62-year-old white man comes to the office for follow-up of benign prostatic hypertrophy (BPH), which was diagnosed 1 week ago. He had described a 6-month history of increased nocturia, double voiding, and decreased strength of urinary flow; he had not had these symptoms before. He has no personal or family history of prostate cancer. He takes no medications and he has no allergies. Physical examination 1 week ago was remarkable for an enlarged prostate without nodularity. Urinalysis and prostate-specific antigen tests were normal. Today, he has brought some newspaper articles about saw palmetto and wonders about its use in treatment of his symptoms. You recall a recent meta-analysis about the effectiveness of saw palmetto for BPH. In this study, saw palmetto was compared with placebo. The results are shown.

Saw Palmetto Versus Placebo in the Symptomatic Treatment of Benign Prostatic Hypertrophy

Treatment			
Improvement in Symptoms	Placebo	Saw Palmetto	Statistical Significance
Patient-reported	191/330 (58%)	242/329 (74%)	<i>p</i> <0.001
Physician-assessed	100/262 (38%)	165/262 (63%)	<i>p</i> <0.001

9. Which of the following is the most accurate interpretation of these data regarding patients taking saw palmetto?

- (A) Improvement is seen in both physician-assessed and in patient-reported symptoms
- (B) Patient-reported symptoms are more improved than are physician-assessed symptoms
- (C) Statistical significance is not important compared with symptom improvement
- (D) Statistically significant changes in physician-assessed symptoms do not result in decreased symptoms for patients
- (E) No conclusion can be drawn from the present information
- 10. Based on the physician-assessment data, the number of patients who need to be treated with saw palmetto to show significant improvement in one patient is which of the following?
 - (A) 4
 - (B) 6
 - (C) 12
 - (D) 25
 - (E) 38

END OF SET

- 11. A 46-year-old man with Marfan syndrome, aortic insufficiency, and mitral regurgitation comes to the emergency department because he has had severe substernal chest pain for the past 3 hours. He describes the pain as tearing in quality and radiating to the neck. One week earlier he experienced similar but less severe chest pain and treated himself with aspirin. Which of the following is the most likely underlying cause for his worsening symptoms?
 - (A) Acute bacterial endocarditis
 - (B) Acute myocardial infarction
 - (C) Dissection of the aorta
 - (D) Esophageal reflux with spasm
 - (E) Perforated peptic ulcer

- 12. A 19-year-old Hispanic woman who is a regular patient comes to the office for her annual physical examination and cervical cytology. She tells you that she has not had a menstrual period for the past 6 months. She is a college student who is in good health, has not had any medical illnesses or surgery, and has never been pregnant. She is currently sexually active and uses barrier contraception. She reports that during the past year her menses had become very irregular prior to complete cessation 6 months ago. She also notes that she has gained about 9 kg (20 lb) in the past 6 months and has had an increasing problem with acne and a troublesome growth of hair on her thighs and abdomen. She has been somewhat depressed about this, and her grades have declined. She reports that one of her sisters also had this problem prior to getting married. Physical examination shows a mildly obese young woman who has scattered facial acne, mild male pattern hair growth on the abdomen, and an essentially normal pelvic examination except for slight enlargement of the uterus and both ovaries. This patient's history is most consistent with which of the following?
 - (A) Androgen-producing ovarian tumor
 - (B) Cushing syndrome
 - (C) Hypothyroidism
 - (D) Polycystic ovarian syndrome
 - (E) Prolactinoma
- 13. A 4-year-old boy with cystic fibrosis is brought to the emergency department 20 minutes after being found unconscious in his yard by his parents. He had been playing outside all afternoon; the outside temperature was 95°F. He had been feeling well lately with no recent acute exacerbations of cystic fibrosis. On arrival, he responds to pain but speech is incoherent. His temperature is 41.2°C (106.2°F), pulse is 148/min, respirations are 36/min and shallow, and blood pressure is 88/46 mm Hg. His skin is hot and dry. The lungs are clear to auscultation. Muscle tone is poor; deep tendon reflexes are diminished throughout. Neurologic examination shows no focal abnormalities. Which of the following is the most likely underlying mechanism for these findings?
 - (A) Adrenal insufficiency with salt wasting
 - (B) Impaired sweat gland function with reduced ability to regulate heat loss
 - (C) Invasion of the central nervous system by gram-negative organisms
 - (D) Mucous plugging of the airway resulting in secondary infection with Pseudomonas species
 - (E) Primary hypothalamic dysfunction with inability to regulate temperature
- 14. A 44-year-old man comes to the office because of a 3-day history of sore throat, nonproductive cough, runny nose, and frontal headache. He says the headache is worse in the morning and ibuprofen does provide some relief. He has not had shortness of breath. Medical history is unremarkable. He takes no medications other than the ibuprofen for pain. Vital signs are temperature 37.4°C (99.4°F), pulse 88/min, respirations 18/min, and blood pressure 120/84 mm Hg. Examination of the nares shows erythematous mucous membranes. Examination of the throat shows erythema and follicular lymphoid hyperplasia on the posterior oropharynx. There is no palpable cervical adenopathy. Lungs are clear to auscultation. Which of the following is the most likely cause of this patient's symptoms?
 - (A) Allergic rhinitis
 - (B) Epstein-Barr virus
 - (C) Mycoplasma pneumoniae
 - (D) Rhinovirus
 - (E) Streptococcus pyogenes

- 15. A 29-year-old woman comes to the emergency department because she has had increasingly severe lower abdominal pain and nausea for the past 2 days. She is sexually active and does not use any contraception. Her last menstrual period ended 6 days ago. Temperature is 38.3°C (101.0°F). Physical examination discloses abdominal tenderness in the lower quadrants bilaterally with rebound and guarding. Pelvic examination discloses leukorrhea at the cervical os and tenderness of the uterus to palpation. The adnexal areas are tender but no masses are palpable. Which of the following is the most appropriate diagnostic study?
 - (A) Cervical culture
 - (B) Culdocentesis
 - (C) Laparoscopy
 - (D) Serum β -hCG concentration
 - (E) Ultrasonography of the pelvis
- 16. You are visiting an 86-year-old woman in her home at the request of the patient's daughter because of worsening shortness of breath at rest for the past 2 days. The patient is confined to her home because of severe chronic obstructive pulmonary disease with cor pulmonale. She was discharged 1 week ago from the hospital following 3 weeks of treatment for pneumonia that required intubation; her hospital stay was complicated by sepsis. She had a prolonged weaning program from intubation. Prior to discharge, the patient and her daughter met with you to review the patient's advance directive. During the discussion, the patient said, "I'd rather die than be intubated again." At that time, both the patient and her daughter signed an addendum to that effect on the patient's advance directive. Today, the patient is dyspneic and is unable to complete a sentence. Vital signs are temperature 37.8°C (100.0°F), pulse 88/min, respirations 35/min, and blood pressure 100/70 mm Hg. Pulse oximetry shows an oxygen saturation of 84% while the patient is breathing 4 L of oxygen. You ask the patient if she wishes to return to the hospital. She says, "No, I want to die at home." Her daughter takes you aside and says, "My mother doesn't know what she's saying. I insist that she be admitted to the hospital." After further discussion with the daughter regarding support available at home, which of the following is the most appropriate step?
 - (A) Admit the patient to the hospital
 - (B) Arrange for consultation with a home hospice team
 - (C) Consult with the hospital ethics committee
 - (D) Order a home continuous positive airway pressure machine and instruct the daughter in its use
 - (E) Request a visiting nurse consultation for pulmonary suctioning
- 17. A 3-year-old white girl is brought to the office by her parents for a follow-up visit 48 hours after receiving a 5-TU PPD skin test. The test was done as part of a routine screening for enrollment in a homeless shelter. Physical examination shows 10 mm of induration at the puncture site; the examination is otherwise normal. The parents tell you they are shocked by this finding since both of their skin tests were nonreactive. They say they were born in this country and tell you that their daughter has always been in good health. She has not had much medical care in the past 2 years but she has been healthy. Until moving into this shelter they had been "squatters" in vacant buildings. Which of the following is the most appropriate step at this time?
 - (A) Call her previous physician to obtain more history
 - (B) Order a chest x-ray
 - (C) Order a test for HIV antibody
 - (D) Repeat the PPD skin test
 - (E) Schedule gastric aspiration for culture on successive days



A 35-year-old man is brought to the emergency department because of altered mental status. He is disoriented and reports problems with his vision. You have been his physician for the past 3 years. He has type 1 diabetes mellitus and a known history of intravenous drug use. You last saw him 2 weeks ago; at that visit his serum glucose concentration was 150 mg/dL 3 hours after eating. Today, vital signs are temperature 38.1°C (100.5°F), pulse 110/min, and blood pressure 190/70 mm Hg. On physical examination pupils are constricted; funduscopic examination of the left eye following dilation is shown. Which of the following is the most appropriate test at this time?

- (A) Blood cultures
- (B) Chest x-ray
- (C) Hemoglobin A_{1c} level
- (D) HIV antibody titer
- (E) Plasma renin activity
- 19. A 34-year-old white woman comes to the emergency department because of a persistent dull headache for the past 3 days. She has been taking acetaminophen without relief. She says, "I haven't slept in 3 days and I am having trouble focusing at work." There is no history of trauma and she takes no medications. She has smoked one pack of cigarettes daily for 14 years but does not drink alcoholic beverages. Vital signs are temperature 37.5°C (99.5°F), pulse 86/min, respirations 19/min, and blood pressure 182/100 mm Hg. Examination of the head shows no abnormalities. Pupils are equal, round, and reactive to light; there is mild photophobia. Funduscopic examination is normal. A serous effusion is noted on examination of the left tympanic membrane. Neck is stiff with painful flexion; when the patient's neck is flexed forward, she reports and electric shock sensation. Mild expiratory wheezes are heard on auscultation of the chest. A midsystolic click is heard best at the left sternal border; there are no murmurs or gallops. Abdominal examination shows striae, but is otherwise noncontributory. Examination of the lower extremities shows varicosities bilaterally and 1+ edema; muscle strength is 4/5. Neurologic examination shows no other abnormalities. Which of the following physical findings is most indicative of the need for immediate further evaluation?
 - (A) Abdominal striae
 - (B) Expiratory wheezes
 - (C) Midsystolic click
 - (D) Neck stiffness
 - (E) Tympanic effusion

Items 20-21

A 58-year-old postmenopausal woman comes to the office because of vaginal bleeding. She has had two episodes of spotting, about 1 month apart. Menopause occurred 6 years ago and she has been taking hormone replacement therapy. She is 165 cm (5 ft 5 in) tall and weighs 102 kg (225 lb); BMI is 38 kg/m². Blood pressure is 160/90 mm Hg. Pelvic examination is consistent with postmenopausal changes. On bimanual examination the uterus is difficult to palpate, and there are no adnexal masses. She saw an article on the Internet that describes how ultrasonography can be used to evaluate postmenopausal bleeding. You locate the original article, which correlates endometrial biopsies with the diagnosis of endometrial pathologies and ultrasound determinations of endometrial thicknesses in symptomatic postmenopausal women taking hormone replacement therapy. The study results are shown:

Endometrial thickness and endometrial biopsy results			
Endometrial thickness	Abnormal biopsy	Normal biopsy	
>10 mm	25	50	
<10 mm	6	500	

- 20. Based upon these data, the sensitivity and specificity of this test for an endometrial abnormality is which of the following?
 - (A) 8% sensitivity and 19% specificity
 - (B) 8% sensitivity and 92% specificity
 - (C) 80% sensitivity and 9.2% specificity
 - (D) 80% sensitivity and 19% specificity
 - (E) 80% sensitivity and 92% specificity
- 21. At the patient's insistence an ultrasound is obtained and shows an endometrial thickness of 12 mm. Based upon the study, which of the following is the probability that she has an endometrial pathology?
 - (A) 5%
 - (B) 10%
 - (C) 25%
 - (D) 33%
 - (E) 50%

END OF SET

- 22. A 35-year-old white man with spina bifida is admitted to the hospital for a urologic procedure. He has been functionally independent in activities of daily living and is employed doing inventory control in a local sporting goods store. He has maintained continence through periodic self-catheterization. The patient is paraplegic, has recurrent calcium oxalate kidney stones, and recent onset of incontinence secondary to detrusor and bladder neck dysfunction. Vital signs are normal. Physical examination shows a well-developed, well-nourished man in no acute distress. Aside from paraplegia, lower extremity muscle atrophy, and lower abdominal surgical scars, the physical examination discloses no abnormalities. He had an episode of anaphylaxis secondary to latex allergy during a previous operation for functional expansion of his bladder through a bowel anastomosis. Which of the following is most important to consider in the care of this patient?
 - (A) Administration of injectable medications with disposable syringes
 - (B) Preparation of food by outside contractors
 - (C) Type of cleaning agents used to sterilize bed linens
 - (D) Use of rubber urethral catheters
 - (E) Use of topical moisturizing agents for skin care

- 23. A 44-year-old Irish American woman with a 10-year history of arthritis comes to the office because she has had increasing pain and stiffness in her hands, wrists, and knees during the past several months. She also has had increasing fatigue for the past month, along with a weight loss of 1.8 to 2.2 kg (4 to 5 lb). She has seen numerous physicians for her arthritis in the past and has tried various medications and devices, including copper bracelets from Mexico given to her by friends. Review of her medical records confirms that the initial diagnosis of rheumatoid arthritis is correct. She says, "I had several drop attacks during the past 3 months." She characterizes these attacks as episodes of weakness and loss of feeling in her legs for several minutes. During one of these episodes, she became incontinent. She currently takes aspirin approximately four times daily and ibuprofen occasionally. Physical examination shows facial plethora and swollen and painful metacarpophalangeal and knee joints, bilaterally. There is moderate ulnar deviation of the fingers. The remainder of the examination discloses no abnormalities. Which of the following is the most likely cause of her "drop attacks?"
 - (A) Adrenal insufficiency
 - (B) Anxiety
 - (C) Atlanto-axial instability
 - (D) Cardiac arrhythmia
 - (E) Cerebral ischemia
- 24. A 26-year-old woman comes to the office because of fever, cough, and increasing shortness of breath for the past 3 days. She has been living in homeless shelters and says she uses intravenous drugs. She recently tested positive for HIV infection. She takes no medications and has no history of asthma, pneumonia, or tuberculosis. Her last medical evaluation was 5 years ago. Vital signs are temperature 39.0°C (102.2°F), pulse 100/min, respirations 28/min, and blood pressure 110/60 mm Hg. Auscultation of the chest discloses crackles and rhonchi posteriorly over the right lower lung field with tubular breath sounds and dullness to percussion. No sputum could be obtained due to splinting of the chest wall. Chest x-ray shows consolidation of the right lower lobe. Complete blood count and arterial blood gas analysis while breathing room air are shown:

Blood	Arterial blood gas analysis		
Hematocrit	36%	Po_2	72 mm Hg
Hemoglobin	12.7 g/dL	Pco_2	33 mm Hg
WBC	7800/mm ³	pH	7.44
Neutrophils, segmented	70%		
Neutrophils, bands	16%		
Lymphocytes	14%		

Which of the following is the most likely diagnosis?

- (A) Legionnaires disease
- (B) Pneumonia caused by Pneumocystis jiroveci
- (C) Pneumonia caused by Streptococcus pneumoniae
- (D) Pulmonary embolism
- (E) Pulmonary tuberculosis
- 25. A 19-year-old woman comes to the emergency department because, she says, "I'm burning up." Medical history is significant for intravenous drug use. Physical examination discloses a systolic heart murmur over the precordium. An expected physical finding will be which of the following?
 - (A) Decreased intensity of S_1
 - (B) Increased intensity of the murmur with deep inspiration
 - (C) Increased intensity of the murmur with forced expiration
 - (D) Positive Kussmaul sign (rise in jugular venous pulse with inspiration)
 - (E) Right-sided gallop



A 20-year-old man comes to the emergency department after injuring his shoulder playing tennis. He is a student at a local college and participates in some intramural sports. He has no other health problems. He injured his shoulder once during a high school wrestling match. Physical examination shows tenderness over the left shoulder. He cannot actively move his shoulder and passive motion causes extreme pain. X-ray of the shoulder is shown. Which of the following is the most likely cause of this recurring injury?

- (A) Acromioclavicular joint dysfunction
- (B) Damage to the capsular ligaments
- (C) Osteoarthritis of the glenohumeral joint
- (D) Rotator cuff detachment
- (E) Weakness of the deltoid muscle
- 27. A 75-year-old woman comes to the office because she has band-like, burning pain in her right upper abdomen extending from the epigastrium around to the midline of the back. Physical examination discloses no abdominal tenderness to palpation. Findings on ultrasonography of the gallbladder are normal. Serum amylase concentration is within the reference range. Which of the following is the most likely diagnosis?
 - (A) Acalculous cholecystitis
 - (B) Chronic relapsing pancreatitis
 - (C) Diverticulitis of the cecum
 - (D) Herpes zoster
 - (E) Penetrating duodenal ulcer

- 28. A 15-year-old African American girl comes to the emergency department because, she says, "something has been sticking out of my bottom since I had a bowel movement this morning." She has not had previous episodes, although for more than 1 year she has had occasional difficulty passing stools. She is not in pain but is afraid to move her bowels for fear that the problem will worsen. She tells you that she moved away from home more than a year ago and that her parents contribute nothing to her support. She has a 6-month-old child and lives with a 28-year-old female cousin. She has never been married and does not work or attend school. She has no other symptoms. In order to follow the correct procedure for treating a minor, which of the following is the most appropriate step prior to evaluating this patient's rectal problem?
 - (A) Accept the girl's consent as sufficient
 - (B) Obtain a court order permitting evaluation
 - (C) Obtain the written consent of at least two licensed physicians
 - (D) Obtain written consent from at least one of her parents
 - (E) Obtain written consent from her 28-year-old cousin

Items 29-30

A 38-year-old woman who is 10 weeks pregnant asks you about a new, noninvasive method for the detection of Down syndrome. She shows you the article from the newspaper. Because you have not read the original article, you locate it and see that it shows the following data regarding the "new test" in a general obstetrical population:

	Gestational weeks at which time test was done		
New Test	16	20	
Sensitivity	0.37 (0.19-0.55)*	0.60 (0.17-1.00)*	
Specificity	0.84 (0.79–0.88)	0.82 (0.78–0.87)	
Positive predictive value	0.20 (0.09-0.32)	0.06 (0.00-0.13)	
Negative predictive value	0.92 (0.89-0.96)	0.99 (0.98-1.00)	
*95% confidence interval			

29. Which of the following is the most accurate statement regarding these data?

- (A) The positive predictive value is higher at 20 weeks' gestation than at 16 weeks' gestation
- (B) The sensitivity and specificity of the test are unacceptably low
- (C) This test is a good screening test for the detection of fetuses with Down syndrome
- (D) This test is more sensitive at 16 weeks' gestation than at 20 weeks' gestation
- (E) This test's best feature is the accuracy with which it detects normal fetuses
- 30. Her age-related risk for delivering an infant with Down syndrome is 1 in 176 births. If this woman were interested in the new test to avoid an invasive procedure, you would advise her of which of the following?
 - (A) Because the new test needs to be run twice, it is not really practical
 - (B) The new test is not sensitive enough to warrant its use
 - (C) The new test is sensitive enough to accurately detect fetuses with Down syndrome if done at 16 weeks' and at 20 weeks' gestation
 - (D) She has a 2% risk for having a baby with Down syndrome if the new test is positive at 16 weeks' gestation
 - (E) She has a 60% risk for having a baby with Down syndrome if the new test is positive at 20 weeks' gestation

END OF SET

- 31. While you are on rounds at a local nursing facility, the nurse mentions that your patient, a 79-year-old African American woman, appears to be a "poor eater." She was admitted to the nursing facility 3 months ago from the hospital where she was treated for congestive heart failure. Her daughter had moved away from the area, and nursing home placement was necessary because the patient could no longer function independently. Her present medications include furosemide and digoxin. Physical examination is normal except for a weight loss of 3.5 kg (7 lb) during the past 3 months. In your conversation with the patient, she says, "No, I'm not depressed, I just don't have an appetite anymore. Nothing tastes good to me. I have a little bit of nausea most of the time." Which of the following is the most appropriate initial diagnostic study?
 - (A) Chest x-ray
 - (B) Complete blood count
 - (C) Determination of serum albumin concentration
 - (D) Determination of serum digoxin level
 - (E) Upper gastrointestinal barium study

32.



A 58-year-old man comes to the office because of a lesion on his lower lip that developed 9 months ago. He has not seen a physician during the past 5 years and says, "My wife made me come to see you today." Physical examination of the lips discloses the findings shown in the photograph. The lower lip is fixed to the anterior aspect of the mandible. Which of the following is the most likely diagnosis?

- (A) Basal cell carcinoma
- (B) Keratoacanthoma
- (C) Leukoplakia
- (D) Melanoma
- (E) Squamous cell carcinoma

- 33. A 42-year-old woman with a history of multiple sclerosis comes to the office because she had a sudden loss of vision in the right eye. She has no history of diplopia. External ocular movements are normal but funduscopic examination shows pallor of the optic disk. This patient's condition is most likely a result of demyelination of which of the following?
 - (A) Medial longitudinal fasciculus
 - (B) Oculomotor nerve
 - (C) Optic nerve
 - (D) Trigeminal nerve
 - (E) Visual cortex
- 34. A 24-year-old woman comes to the office for a routine health maintenance examination. She has been generally healthy for the past year. She is 155 cm (5 ft 1 in) tall and weighs 68 kg (150 lb); BMI is 28 kg/m². Vital signs are temperature 37.0°C (98.6°F), pulse 60/min, respirations 18/min, and blood pressure 118/54 mm Hg. Physical examination shows several small (<1 cm), smooth, slightly irregular, mobile, mildly tender lymph nodes palpable in her left groin just below the inguinal ligament. The most likely source of this lymphadenopathy will be found in which of the following?</p>
 - (A) Adnexa
 - (B) Bone marrow
 - (C) Lateral thigh
 - (D) Lower abdomen
 - (E) Vulva
- 35. A 15-year-old girl is brought to the office by her mother because of abdominal pain and constipation for the past several weeks. Her mother says, "She is getting almost all A's in school and she is on the track team." You ask the patient about her diet and she responds, "I'm kind of a picky eater." She requests a laxative to help with her constipation. She is 158 cm (5 ft 2 in) tall and weighs 43 kg (95 lb); BMI is 18 kg/m². Pulse is 65/min. Specific additional history should be obtained regarding which of the following?
 - (A) Color, caliber, and frequency of bowel movements
 - (B) Exposure to sexually transmitted diseases
 - (C) Family history of irritable bowel syndrome
 - (D) Menstrual history
 - (E) Use of illicit drugs
- 36. A 60-year-old man had a total thyroidectomy and excision of enlarged left jugular lymph nodes for follicular carcinoma. The operation was uncomplicated. He is receiving intravenous 5% dextrose and 0.45% saline with potassium. Twelve hours after the operation he develops circumoral numbness and paresthesias in his fingertips, and he becomes very anxious. Vital signs are temperature 37.6°C (99.7°F), pulse 90/min, respirations 16/min, and blood pressure 140/90 mm Hg. Physical examination discloses a dry neck dressing and no stridor. Extremities are warm, with brisk capillary refill time. Additional physical examination is most likely to show which of the following?
 - (A) Babinski sign present bilaterally
 - (B) Chvostek sign
 - (C) Deviation of the tongue to the left side
 - (D) A drooping left shoulder
 - (E) Hyporeflexia

- 37. A 63-year-old African American woman is in the hospital recovery room 4 hours after elective left hemicolectomy for colon carcinoma at the splenic flexure. She has a preoperative written directive for no blood products through transfusion for religious reasons. Medical history is significant for hypertension and coronary artery disease. The nurse tells you the patient's blood pressure has progressively declined since the operation. Vital signs now are temperature 35.8°C (96.4°F), pulse 130/min, respirations 20/min, and blood pressure 80/50 mm Hg. Physical examination discloses a slightly distended abdomen with an intact incision. ECG shows sinus tachycardia. Urine output has been 10 mL during the past 2 hours. Hematocrit is 30%; preoperative hematocrit was 41%. The patient has received 4 L of intravenous crystalloid in the recovery room. Reported operative blood loss was 200 mL. Drainage from the nasogastric tube is clear. Damage to which of the following structures is most likely responsible for these findings?
 - (A) Aorta
 - (B) Epigastric artery
 - (C) Liver
 - (D) Middle colic artery
 - (E) Spleen
- 38. A 32-year-old man and his 29-year-old wife come to the office for evaluation for infertility. The wife's gynecologist has reported that her anatomic and physiologic evaluation disclosed no abnormalities and that assessment of potential male factors is needed. The husband is 188 cm (6 ft 3 in) tall with fair skin and little facial hair. He has mild gynecomastia and small, firm testicles. No sperm are seen on semen analysis. Which of the following tests is most likely to establish the underlying cause of this couple's infertility?
 - (A) Karyotype from peripheral leukocytes
 - (B) Serum estrogen and testosterone concentrations
 - (C) Serum follicle-stimulating hormone and luteinizing hormone concentrations
 - (D) Serum prolactin concentration
 - (E) Testicular ultrasonography
- 39. A 50-year-old woman comes to the office for the first time because of recurrent abdominal pain. Review of her extensive medical chart, which she has brought with her, discloses that she has a long history of varying physical symptoms. Definitive causes for these symptoms have not been found despite extensive diagnostic studies, consultations with many physicians, and several surgical explorations. She gives dramatic and exaggerated descriptions of her present and past symptoms, and she makes conflicting statements about her history. She has been hospitalized at least 23 times since age 18 years. Which of the following is the most likely diagnosis?
 - (A) Borderline personality disorder
 - (B) Conversion disorder
 - (C) Histrionic personality disorder
 - (D) Occult medical disorder
 - (E) Somatic symptom disorder

- 40. Several patients with hypertension whom you have treated for many years have recently had strokes. You are frustrated by this outcome and review the literature on the efficacy of antihypertensive treatments in preventing stroke. A large, multicenter, randomized trial shows that a particular antihypertensive medication lowers the 5-year risk for stroke from 8 per 1000 patients to 6 per 1000 patients, providing a relative risk reduction of 25%. Based on this study, the number of patients with hypertension who must be treated to prevent one stroke in 5 years is which of the following?
 - (A) 4
 - (B) 75
 - (C) 250
 - (D) 500
 - (E) 2000

NOTE: THIS IS THE END OF THE FIP BLOCK. ANY REMAINING TIME MAY BE USED TO CHECK ITEMS IN THIS BLOCK.

Block 2: ACM

Items 41–70; Time - 45 minutes

ALL ITEMS REQUIRE SELECTION OF ONE BEST CHOICE.

41. A 5-year-old boy is brought to the office by his mother because of recurrence of bed-wetting at night. He has a 3-month-old sister who is healthy. Physical examination discloses no abnormalities. Results of urinalysis are shown:

Specific gravity1.010GlucoseNegativeProteinNegativeMicroscopic0–1 WBC/hpf, 0 RBC/hpf

Which of the following is the most appropriate information to share with his parents?

- (A) The condition will cease if they reprimand him for deliberately wetting the bed
- (B) The condition is self-limiting, and they should take care to lessen the emotional impact on their child
- (C) The condition is a potentially serious problem and could represent chronic inflammation of the kidneys
- (D) The condition may be a precursor of diabetes mellitus
- (E) The condition signifies a serious underlying emotional disorder
- 42. A 78-year-old German American woman is admitted to the hospital for replacement of her left knee joint due to degenerative joint disease. She has type 2 diabetes mellitus, a long history of hypertension, and chronic renal failure presumed secondary to diabetes mellitus and hypertension. Reversible causes of renal failure have been excluded. She underwent a tonsillectomy at age 9 years and a laparoscopic cholecystectomy at age 68 years. Serum creatinine concentration on admission was 6.0 mg/dL. Her current therapy includes a low-sodium, low-protein American Diabetes Association (ADA) diet, enalapril, and acetaminophen. She is a retired seamstress. She and her husband live on a farm 90 miles from the nearest dialysis facility. In considering long-term treatment options for this patient, which of the following is the most appropriate factor to consider?
 - (A) Her eligibility to receive Medicare
 - (B) Her history of an abdominal operation
 - (C) Her history of arthritis
 - (D) Her suitability for home dialysis
 - (E) Her willingness to move to the city
- 43. Three weeks ago a 45-year-old man was admitted to the hospital because of frostbite of both feet. He was treated by rapid rewarming and protective care of the feet. All the toes on the right foot have turned black. He has become slightly febrile and progressively more confused during the past few days. Examination discloses cellulitis in the midfoot. Which of the following is the most appropriate treatment?
 - (A) Amputation
 - (B) Application of topical collagenase
 - (C) Debridement of necrotic skin over the toes
 - (D) Hyperbaric oxygen
 - (E) Whirlpool therapy



A 54-year-old woman is in the out-patient surgery center for biopsy of a cervical lymph node, which was ordered because of progressive adenopathy. She was given lidocaine infiltration and heavy intravenous sedation. A left node biopsy was attempted, but when diagnostic tissue was not obtained, a right node biopsy was done. Three hours later as the patient prepares to dress for discharge home, she tells the nurse that the skin across her shoulders and up into her neck feels "spongy and crackled." Chest x-ray is shown. Which of the following is most appropriate to tell the patient?

- (A) The sensation is probably due to the lidocaine spreading through the subcutaneous tissue and that she can be discharged home
- (B) This is a life-threatening clostridial infection; antibiotic therapy and an emergency operation will be arranged
- (C) This is a routine problem after surgical incisions and tissue dissection to obtain biopsy material
- (D) This is probably due to the volume of intravenous fluid she has received; you will give her a dose of furosemide and discharge her home
- (E) This may be due to pleural puncture; she should be admitted to the hospital for observation

- 45. A 42-year-old man comes to the office for preoperative evaluation prior to undergoing adrenalectomy scheduled in 2 weeks. One month ago, he received care in the emergency department for pain over his right flank following a motor vehicle collision. At that time, blood pressure was 160/100 mm Hg and CT scan of the abdomen showed an incidental 10-cm left adrenal mass. Results of laboratory studies, including complete blood count, serum electrolyte concentrations, and liver function tests, were within the reference ranges. The patient otherwise had been healthy and had never been told that he had elevated blood pressure. He takes no medications. A follow-up visit in the office 2 weeks ago disclosed elevated urinary normetanephrine and metanephrine and plasma aldosterone concentrations. The patient was referred to a surgeon, who recommended the adrenalectomy. Today, vital signs are temperature 36.6°C (97.9°F), pulse 100/min, respirations 14/min, and blood pressure 170/95 mm Hg. Physical examination discloses no significant findings. Initial preoperative preparation should include treatment with which of the following?
 - (A) Labetalol
 - (B) A loading dose of potassium chloride
 - (C) Nifedipine
 - (D) Phenoxybenzamine
 - (E) Spironolactone
- 46. A 24-year-old Hispanic law student comes to the office because of a nosebleed that began 20 minutes ago when he was hit in the face by a basketball. He says he has had at least four nosebleeds during the past year since he started playing basketball. Each episode of bleeding stopped after 1 minute of pinching his nostrils together. He has no personal or family history of bleeding disorders. He takes no medications. He is 190 cm (6 ft 3 in) tall and weighs 99 kg (219 lb); BMI is 27 kg/m². Vital signs are temperature 36.7°C (98.0°F), pulse 80/min, respirations 20/min, and blood pressure 138/70 mm Hg. The bleeding stops with pinching of the nostrils. General physical examination of the head and face shows swelling of the nose. The remainder of the physical examination discloses no abnormalities. Which of the following is the most appropriate next step?
 - (A) Examine the nose with a nasal speculum
 - (B) Obtain a complete blood count
 - (C) Recommend avoiding contact sports
 - (D) Recommend carrying phenylephrine nasal spray at all times
 - (E) Refer the patient to an otorhinolaryngologist
- 47. A 43-year-old man with a history of self-mutilation comes to the emergency department because of pain in his right thigh and shaking chills during the past 3 days. He says he intentionally burned his right thigh several times with a cigarette lighter 6 days ago. This morning he soaked his thigh in a tub of hot water and massaged it, after which a large amount of "greenish fluid" drained from the wound sites. The patient normally takes lithium carbonate but stopped 3 months ago after he lost his job. Medical history is otherwise unremarkable. Vital signs are temperature 39.2°C (102.5°F), pulse 170/min, respirations 18/min, and blood pressure 120/60 mm Hg. Physical examination shows an edematous right lateral thigh with multiple burn sites with a white exudative appearance. There is erythema surrounding the burn areas with red streaks extending up the thigh. Palpation of the burn sites discloses fluctuance. Results of laboratory studies show a hemoglobin concentration of 14 g/dL and a leukocyte count of 19,000/mm³. In addition to beginning antibiotic therapy, which of the following is the most appropriate next step?
 - (A) Incision and drainage
 - (B) Psychiatric consultation
 - (C) Topical silver sulfadiazine
 - (D) Transfer to a burn center
 - (E) Observation only

- 48. A 13-year-old girl is brought to the office for a health maintenance visit. She was diagnosed with Turner syndrome in infancy during a work-up for coarctation of the aorta. During today's visit, her mother reports that the girl has been talking about babies. You have been the patient's physician for the past 6 years and know she is prepubescent. It is most appropriate to counsel the patient that if she wishes to have a family she will need to do which of the following?
 - (A) Adopt
 - (B) Have amniocentesis if she gets pregnant
 - (C) Have an operation
 - (D) Receive genetic counseling
 - (E) Receive hormone treatment

49.



A 65-year-old man is admitted to the hospital after he has an inferior wall myocardial infarction. Forty-eight hours later his vital signs are stable. ECG is shown. The most appropriate course of action is to do which of the following?

- (A) Administer atropine
- (B) Administer isoproterenol
- (C) Begin synchronized cardioversion
- (D) Insert a pacemaker
- (E) Observe
- 50. A 38-year-old white male letter carrier returns to the office for follow-up of abnormal results of a liver chemistry profile ordered 3 weeks ago during a routine examination. At that time, physical examination disclosed no abnormalities, but serum AST concentration was 72 U/L. Serum bilirubin and alkaline phosphatase concentrations were within the reference ranges. Medical history is significant for an episode of hepatitis A at age 22 years. He has no history of transfusions or intravenous drug use. He drinks two to three beers daily. Today's follow-up laboratory study results are shown:

Serum	
Anti-HAV	Positive
Anti-HBs	Negative
HBsAg	Positive
HBeAg	Positive

Which of the following is the most appropriate next step?

- (A) Begin interferon-alfa therapy
- (B) Begin corticosteroid therapy
- (C) Instruct him to cease alcohol consumption and retest him in 2 months
- (D) Order hepatitis B virus polymerase chain reaction test
- (E) Schedule liver biopsy

- 51. A 68-year-old man is in the hospital because he requires mechanical ventilation for an exacerbation of chronic obstructive pulmonary disease. On the second day after admission he developed a pneumothorax on the right side that required tube thoracostomy. An air leak is noted for the next 24 hours, which now has stopped. However, the patient has become restless and combative. Breath sounds are diminished in the right side of the chest and the patient now has tachycardia. Blood pressure is 130/80 mm Hg. After ordering a STAT portable x-ray of the chest, which of the following is the most appropriate step?
 - (A) Add 4 cm of positive end-expiratory pressure
 - (B) Administer β -blocking medications
 - (C) Administer alprazolam
 - (D) Remove the patient from the ventilator and ventilate him with a bag-valve mask
 - (E) Reposition the chest tube
- 52. A 36-year-old man comes to the office because of headaches that began 2 weeks ago. The headaches are moderately severe, are present when he awakens in the morning, and are relieved with over-the-counter analgesics. He has no prior history of headaches. He tells you he was promoted to an upper-level managerial position in his accounting firm about 8 months ago, which necessitated relocating. Physical examination now discloses no abnormalities except for blurring of the optic disc margins bilaterally. Which of the following is the most appropriate next step?
 - (A) Begin a trial of a β -blocking medication
 - (B) Order CT scan of the head
 - (C) Order EEG
 - (D) Refer him for consultation with a neurologist
 - (E) Refer him for consultation with a neurosurgeon
- 53. A healthy 2-year-old African American girl is brought to the office for a routine well-child visit. The child was weaned at 6 months of age and began to walk at 10 months of age. On physical examination, she has mild bowlegs (10-degree genu varum). Which of the following is the most appropriate management to recommend at this time?
 - (A) Immediate application of braces
 - (B) Increased intake of vitamin D
 - (C) A special exercise program
 - (D) Surgical correction
 - (E) No treatment is needed at this time
- 54. A 40-year-old man with paranoid schizophrenia is transferred to the emergency department from the residential facility where he lives 2 hours after having swallowed a nail. The patient says he does not have any symptoms. Medical history is otherwise unremarkable. His only current medication is haloperidol. The patient is not in acute distress. Vital signs are normal. Physical examination shows no abnormalities. Mental status examination discloses a flat affect, distractibility, and derailment of thoughts. X-ray of the abdomen is obtained and shows a 4-cm nail in the left upper quadrant. No free air is visible. After admitting the patient to the hospital, which of the following is the most appropriate management?
 - (A) Administration of a cathartic agent to induce passage of the nail through the gut
 - (B) Administration of ipecac to induce vomiting and expectoration of the nail
 - (C) Observation to allow passage of the nail via normal peristalsis
 - (D) Open laparotomy and removal of the nail through a gastrotomy incision
 - (E) Removal of the nail through endoscopic esophagogastroscopy



A 51-year-old woman comes to the emergency department after falling on an icy sidewalk. She reports wrist pain. Vital signs are stable. Physical examination shows swelling of the left wrist and tenderness over the dorsum of the wrist. X-ray of the left wrist is shown. Which of the following is the most appropriate next step?

- (A) Arrange consultation with an orthopaedic surgeon
- (B) Have her see her primary care physician in 1 week
- (C) Order arthrography of the wrist
- (D) Order MRI of the wrist
- (E) Tell the patient she is fine and discharge her
- 56. A 25-year-old woman who is 19 weeks pregnant comes to the office for a prenatal examination. Her father had classic hemophilia. A karyotype obtained from an amniotic fluid sample of the patient shows that the fetus is XY. Which of the following should you tell the patient regarding her infant?
 - (A) The infant will neither have hemophilia nor be a carrier
 - (B) The infant has a 50% risk for hemophilia
 - (C) The infant has a 50% risk for being a carrier
 - (D) The infant has a 75% risk for hemophilia
 - (E) The infant has a 75% risk for being a carrier

55.

57. A 9-year-old boy is brought to the emergency department by his father because of lethargy. On physical examination, the boy is slightly lethargic and has deep respirations, which are 32/min. The father, who is a single parent, says, "He is always thirsty and he pees a lot." Results of laboratory studies are shown:

Serum	
Glucose	850 mg/dL
Na^+	132 mEq/L
\mathbf{K}^+	4.1 mEq/L
Cl	92 mEq/L
HCO_3^-	6 mEq/L

After admitting the boy to the hospital, which of the following is the most appropriate therapy?

- (A) Administer normal saline and add potassium once urinary output is adequate
- (B) Correct the acidosis with oral bicarbonate solution
- (C) Correct the dehydration with hypotonic saline solution
- (D) Give phenobarbital to prevent hyponatremic seizures
- (E) Institute intermediate-acting insulin to correct hyperglycemia
- 58. A 52-year-old Hispanic man is admitted to the hospital because of severe dyspnea and cough productive of tenacious, brownish-yellow sputum for the past 3 weeks. He has a 15-year career history of sandblasting old buildings. He has smoked two packs of cigarettes daily for the past 30 years. The patient is 168 cm (5 ft 6 in) tall and weighs 59 kg (130 lb); BMI is 21 kg/m². Vital signs are temperature 36.8°C (98.2°F), pulse 94/min, and blood pressure 150/92 mm Hg. Pulse oximetry on room air shows an oxygen saturation of 70%. On physical examination he is in moderately severe distress with pursed lips and cyanotic nail beds. Chest has an increased anteroposterior diameter. Auscultation of the chest discloses scattered wheezes and rhonchi over all lung fields. Cardiac examination discloses muffled heart sounds and an S₄. Fingers are clubbed. Chest x-ray shows hyperinflated lungs, flattened diaphragm, large, irregular opacities in the upper lobes, and eggshell calcifications of the hilar lymph nodes. In addition to antibiotic therapy, which of the following is the most appropriate intervention?
 - (A) Azathioprine therapy
 - (B) Bronchoscopy
 - (C) Continuous humidified oxygen
 - (D) Nocturnal continuous positive airway pressure (CPAP)
 - (E) Referral for lung reduction
- 59. A 26-year-old police officer comes to the office for an annual health maintenance examination. He is physically active and feels well, but he notes that his asthma has been more active during the past month. He says that he has had to use his albuterol inhaler one to two times daily for wheezing and chest tightness. He has not had gastroesophageal reflux symptoms, productive cough, or fever. Medical history is remarkable for atopic allergies, especially to pollen and cats. He has had cold-and exercise-induced asthma for the past 14 years. He takes no other medications. He is 188 cm (6 ft 2 in) tall and weighs 90 kg (200 lb); BMI is 25 kg/m². Vital signs are temperature 37.0°C (98.6°F), pulse 70/min, respirations 12/min, and blood pressure 120/76 mm Hg. Physical examination shows no abnormalities except for scattered rhonchi and wheezes with forced expiration. Peak expiratory flow rate is 240 L/min. Which of the following is the most appropriate management?
 - (A) Chest x-ray
 - (B) Fexofenadine therapy
 - (C) Increased use of the albuterol inhaler
 - (D) Initiation of a daily corticosteroid inhaler
 - (E) Referral to an allergist

- 60. A 31-year-old white woman comes to the office for initial prenatal care. She is 12 weeks pregnant by date of her last menstrual period. This is her fourth pregnancy; she has three healthy children. Her last pregnancy resulted in cesarean delivery because of fetal distress during labor. Her history includes heavy use of alcohol and cigarettes, and multiple sexual partners. In addition to routine prenatal laboratory work-up, the patient consents to an HIV antibody test, which is later reported as positive. At a follow-up visit this patient should be counseled regarding which of the following?
 - (A) Amniocentesis is recommended to rule out congenital HIV infection
 - (B) Breast-feeding will increase the risk for transmitting HIV to the infant
 - (C) Immediate termination of pregnancy will decrease her risk for progression to AIDS
 - (D) Repeat cesarean delivery may increase the risk for vertical transmission of HIV
 - (E) The risk for perinatal HIV transmission is greater than 50%
- 61. A 26-year-old woman with HIV infection comes to the office because of a 4-day history of pain and redness of her left lower leg. She says the symptoms began after she tripped over a tree branch in her yard and scraped her left leg. Current medications include antiretroviral therapy and ibuprofen as needed. Vital signs are temperature 38.3°C (100.9°F), pulse 86/min, respirations 14/min, and blood pressure 138/70 mm Hg. There is a 5×8-cm area on the anterior surface of her left lower extremity that is swollen, erythematous, and tender. She previously has developed a rash after taking erythromycin, and she has had an anaphylactic response to penicillin. Which of the following antibiotic therapies is most appropriate for this patient?
 - (A) Amoxicillin
 - (B) Ciprofloxacin
 - (C) Clarithromycin
 - (D) Clindamycin
 - (E) No antibiotic therapy is indicated
- 62. A 22-year-old woman comes to the office because of urticaria. This is her first episode of urticaria and it has occurred and then resolved several times in the past week. The history and physical examination disclose no abnormalities. Which of the following is the most appropriate course of action?
 - (A) Determine the erythrocyte sedimentation rate
 - (B) Determine the serum IgE concentration
 - (C) Determine the total eosinophil count
 - (D) Refer her to an allergist
 - (E) Treat the symptoms
- 63. A 6-month-old male Hispanic infant is brought to the office by his parents because of intermittent swelling of his right scrotum that is more pronounced when he cries. The swelling has never been red or "stuck." Vital signs are normal. A right inguinal hernia is confirmed on physical examination. In discussing repair of the hernia with the parents, it is most appropriate to inform them of which of the following?
 - (A) Herniorrhaphy can be postponed until age 2 years because many hernias close spontaneously
 - (B) Herniorrhaphy can be postponed until age 12 years because oligospermia does not develop before age 12
 - (C) Herniorrhaphy should be scheduled at the earliest convenient time
 - (D) Herniorrhaphy should be scheduled as an emergency operation
 - (E) There is no need to repair the hernia in childhood unless incarceration occurs



A 79-year-old woman is brought to the emergency department by ambulance several minutes after collapsing while attending church. She regained consciousness 5 minutes later en route to the emergency department. On arrival, she is oriented only to person. She feels nauseated and light-headed. Her daughter says she has a history of hypertension treated with hydrochlorothiazide and lisinopril but that she has not taken the medications during the past 4 weeks because she can no longer afford them. Vital signs are temperature 36.0°C (96.8°F), pulse 180/min, respirations 16/min, and blood pressure 75/30 mm Hg. Pulse oximetry on room air shows an oxygen saturation of 88%. The patient is mildly diaphoretic and cool to the touch. Breath sounds are equal bilaterally. Pulses in all four extremities are weakly palpable. Oxygen is administered by face mask, and an infusion of 0.9% saline is administered. ECG is obtained and shown. Which of the following is the most appropriate next step?

- (A) Administration of amiodarone
- (B) Administration of diltiazem
- (C) Cardioversion
- (D) Consultation with a cardiologist
- 65. A 38-year-old man with Down syndrome and severe mental retardation is brought to the emergency department by ambulance because of increasing lethargy for the past several hours. The patient is noncommunicative and you are unable to obtain an initial history of his present illness or a past medical history. You do not know if he takes any medications. Vital signs are temperature 38.3°C (100.9°F), pulse 90/min, respirations 19/min, and blood pressure 120/60 mm Hg. On physical examination the patient is awake but lethargic. Auscultation of the chest discloses clear lungs; cardiac examination discloses a systolic click. Neurologic examination shows decreased muscle tone. Serum electrolyte concentrations are normal. Complete blood count shows a leukocyte count of 18,000/mm³ with 23% band neutrophils. The patient's caregiver, who is also the patient's guardian, cannot be located and staff at the group home where the patient resides cannot be reached by telephone. The patient refuses lumbar puncture for examination of cerebrospinal fluid. Toxicologic screening of the urine is negative. Which of the following is the most appropriate next step?
 - (A) Administer intravenous antibiotics
 - (B) Await contact with the caregiver before proceeding with management
 - (C) Obtain CT scan of the head
 - (D) Obtain echocardiography
 - (E) Obtain EEG

- 66. A 13-month-old child is brought to the emergency department because of urticaria, swelling of the lips, and difficulty breathing immediately after eating an egg. A potential risk for hypersensitivity reaction is posed by vaccination against which of the following illnesses?
 - (A) Hepatitis
 - (B) Influenza
 - (C) Pertussis
 - (D) Poliomyelitis
 - (E) Typhoid fever
- 67. A 59-year-old white woman is admitted directly from the office to the hospital by her primary care physician immediately after abnormal laboratory findings were noted during evaluation of a 2-day history of nausea and a 7-day history of knee pain. She fell and injured her right knee while gardening 1 week ago, and the knee has ached all week. The pain has not responded to a variety of over-the-counter analgesics, all of which contain ibuprofen. She takes hydrochlorothiazide daily for mild hypertension and is otherwise healthy. Vital signs on admission are temperature 37.0°C (98.6°F), pulse 80/min, respirations 12/min, and blood pressure 120/80 mm Hg. Physical examination shows a resolving ecchymosis and mild tenderness over the right patella; the remainder of the examination is noncontributory. Results of laboratory studies are shown:

Serum		Blood	
Urea nitrogen	43 mg/dL	Glucose	89 mg/dL
Creatinine	2.9 mg/dL		-
Calcium	8.8 mg/dL		
Na^+	104 mEq/L		
\mathbf{K}^+	5.3 mEq/L		
Cl	81 mEq/L		
HCO_3^-	14 mEq/L		
Magnesium	1.9 mg/dL		
Phosphorus	5 mg/dL		
Albumin	4.0 g/dL		

ECG shows no abnormalities. Which of the following complications is this patient most likely to develop within 6 hours of admission?

- (A) Atrioventricular nodal reentrant tachycardia
- (B) Pancreatitis
- (C) Pulmonary edema
- (D) Seizures
- (E) Ventricular tachycardia (torsades de pointes)

- 68. A 16-year-old high school student, whose prenatal course you have managed, delivers a 3256-g (7-lb 3-oz) baby girl during the night with the assistance of your associate. On morning rounds you note that the delivery records report that she had mildly elevated blood pressure during labor and sustained an estimated third-stage blood loss of 500 mL. Today blood pressure is 132/84 mm Hg, she is afebrile, and deep tendon reflexes are normal. The uterine fundus is firm and at the level of the umbilicus, and her perineum is slightly edematous. Hematocrit is 33%. She is cuddling her infant and normal bonding seems to be occurring. Which of the following is the most important next step in management?
 - (A) Begin oral ferrous sulfate
 - (B) Begin oral methyldopa
 - (C) Institute fundal massage
 - (D) Order daily sitz baths
 - (E) Provide education for well-baby care
- 69. A 76-year-old German American man comes to the office because of early awakening at night. He has no difficulty falling asleep but routinely wakes up between 2:00 and 3:00 AM. The patient is a retired postal worker, and he has always been physically active. He has diabetes mellitus controlled by diet. He is not obese. The patient drinks one cup of coffee in the morning with breakfast and usually walks for exercise in the morning. Before retiring at night he has one alcoholic beverage. He has no history of depression, nightmares, or snoring and he takes no over-the-counter medications. His wife of 45 years is also in good health. Vital signs are temperature 37.1°C (98.8°F), pulse 96/min and regular, respirations 18/min, and blood pressure 135/90 mm Hg. Physical examination shows a well-nourished, well-developed man. Examination of the head and neck is normal; there are no bruits or jugular venous distention. Chest is clear, and heart is normal with S₁ and S₂. Abdomen is soft and nontender with active bowel sounds and no organomegaly. Rectal examination discloses no abnormalities. Which of the following is the most appropriate management of this patient's insomnia?
 - (A) Advise the patient to discontinue his bedtime drink of alcohol
 - (B) Advise the patient to read and snack in bed to relax
 - (C) Prescribe a vigorous pre-bedtime exercise regimen
 - (D) Prescribe sertraline
 - (E) Prescribe triazolam
- 70. A 36-year-old advertising executive is referred to the office for evaluation of a fasting serum total cholesterol concentration of 249 mg/dL. She has a family history of early coronary artery disease (CAD) and her father died suddenly at age 46 years of myocardial infarction. She tells you that she has never had chest pain. She is not currently sexually active and has no children. She claims that her high-stress lifestyle makes it impossible for her to eat regular meals or to follow a special diet, and she usually eats fast food. She exercises two or three times a week for about 20 minutes on a treadmill. She has smoked one pack of cigarettes daily for the past 20 years. Her only medication is acetaminophen for tension headaches. She is 165 cm (5 ft 5 in) tall and weighs 76 kg (167 lb); BMI is 28 kg/m². Vital signs today are normal. Physical examination discloses no abnormalities except for mild obesity. Institution of which of the following is the most essential step in the prevention of CAD in this patient?
 - (A) Biofeedback-based stress reduction program
 - (B) More rigorous and consistent exercise program
 - (C) Smoking cessation program
 - (D) Strict low-calorie diet
 - (E) Strict low-fat diet

NOTE: THIS IS THE END OF THE ACM BLOCK. ANY REMAINING TIME MAY BE USED TO CHECK ITEMS IN THIS BLOCK.

Answer Key for Step 3 Sample Questions

Block 1: FIP

1. E	9. A	17. B	25. B	33. C
2. D	10. A	18. A	26. B	34. E
3. D	11. C	19. D	27. D	35. D
4. E	12. D	20. E	28. A	36. B
5. E	13. B	21. D	29. E	37. E
6. D	14. D	22. D	30. B	38. A
7. C	15. A	23. C	31. D	39. E
8. E	16. B	24. C	32. E	40. D

Block 2: ACM

41. B	47. A	53. E	59. D	65. A
42. D	48. A	54. E	60. B	66. B
43. A	49. E	55. A	61. D	67. D
44. E	50. C	56. B	62. E	68. E
45. D	51. E	57. A	63. C	69. A
46. A	52. B	58. C	64. C	70. C