You will have one hour to take the test. If you complete the test and leave the room, please do not return until after everyone has completed the test. Round all math answers to the nearest one tenth.

1. The client is taking a statin drug. Which assessment data would be a priority for the nurse to report immediately to the physician?
2. “My heart rate really went up this morning.”
3. “I know I just started this medicine yesterday, but my stomach really is upset.”
4. “Will you call my doctor? I have a really bad headache.”
5. “My calves hurt, and I had a hard time walking to the bathroom.”
6. The nurse is providing group education about lipids to clients who have been diagnosed with hyperlipidemia. What does the best instruction include?
7. High density lipoprotein (HDL) decreases the bad cholesterol (low density lipoprotein {LDL}), and promotes excretion of it through the kidneys.
8. High density lipoprotein (HDL) is called good cholesterol because it removes cholesterol from your body and gets rid of it in your liver.
9. High density lipoprotein (HDL) is called good cholesterol because it increases the oxygen content in the arteries and reduces the amount of plaque build-up.
10. High density lipoprotein (HDL) decreases low density lipoprotein (LDL) and prevents it from converting to very low density lipoprotein (VDRL), which is the worst kind of cholesterol in the body.
11. The client tells the nurse that his doctor wants him to take a medication for his high cholesterol, but he doesn’t know which one would be best. What is (are) the best response(s) by the nurse? Select all that apply.
12. “The cholesterol absorption inhibitor drugs inhibit absorption in the small intestine.”
13. “The statin drugs are good, but will cause a lot of flushing if you swallow them with warm fluids.”
14. “The statin drugs inhibit the making of cholesterol and are considered the best choice.”
15. “The best drugs to raise your high density lipoprotein (HDL) levels are the fibric acid drugs.”
16. “The bile resins keep cholesterol from being absorbed, but have some side effects.”
17. The client is receiving a statin drug. Which assessment data would be a priority for the nurse to report to the physician?
18. Urine output of 150 ml/hour - incorrect; this is an acceptable rate for UO
19. Urine output of 30 ml/hour - correct; not sure why. The book states drug can cause constipation, so I’m assumining it can also contribute to urinary retention, although I found nothing about UO in textbook.
20. Moderate elevation in liver function tests (LFTs) – incorrect; I thought this was correct b/c drug can cause hepatotoxicity
21. Bowel sounds markedly increased in all four quadrants of the abdomen – incorrect; not related (drug can cause constipation, which would probably mean decreased bowel sounds, not increased)
22. The client has been recently diagnosed with hypertension with a sustained blood pressure of 144/90 mm/Hg. The client is concerned about effects on the body. What effects of hypertension on the body will the nurse include in her education of this client? Select all that apply.
23. Heart failure
24. Blindness
25. Liver failure
26. Stroke
27. Kidney damage
28. The client with hypertension is receiving nefedipine (Procardia XL). The nurse determines that the client needs additional medication education when the client selects which menu for breakfast?
29. Whole-wheat pancakes with syrup, and bacon, oatmeal, and orange juice
30. Eggs and sausage, a biscuit with margarine, coffee with cream, and cranberry juice
31. Eggs, whole-wheat toast with butter, Lucky Charms cereal, milk, and grapefruit juice
32. Egg and cheese omelet, tea with sugar and lemon, hash brown potatoes, and prune juice
33. The nurse is taking the initial history of a client admitted to the hospital for hypertension. The physician has ordered a beta-adrenergic blocker. Which statement by the client does the nurse recognize as most significant?
34. “When I have a migraine headache, I need to have the room darkened.”
35. “My father died of a heart attack when he was 48-years-old.”
36. “I don’t handle stress well; I have a lot of diarrhea.”
37. “I have always had problems with my asthma.”
38. Which of the following lists include the three factors that make up blood pressure?
39. Age, weight, and race
40. Blood volume, heart rate, and stroke volume
41. Body mass index, diet, and genetics
42. Cardiac output, blood volume, and peripheral vascular resistance
43. Which statement is accurate in regard to secondary hypertension?
44. It is also known as idiopathic.
45. It accounts for 90% of all hypertensive cases.
46. There is no known cause.
47. It can result from chronic renal impairment.
48. A patient with consistent blood pressures of 180–200 systolic over 90–100 diastolic would benefit most from:
49. Non-pharmacologic measures.
50. Non-pharmacologic measures and a thiazide diuretic.
51. Non-pharmacologic measures and two thiazide diuretics.
52. Non-pharmacologic measures, a thiazide diuretic, and a beta blocker.

1. The client comes to the emergency department complaining of coughing and difficulty breathing. The client’s diagnosis is heart failure. He asks the nurse how difficulty breathing could be a heart problem. What is the best response by the nurse?
2. “The right side of your heart has weakened and blood has entered your lungs.”
3. “The left side of your heart has weakened and blood has entered your lungs.”
4. “The right side of your heart has enlarged and cannot effectively pump blood.”
5. “The left side of your heart is weak and pumps blood too quickly.”
6. The nurse teaches the client about digoxin (Lanoxin) toxicity and determines that learning has occurred when the client makes which statement(s)?
7. “If I have nausea, it means I must stop the medication.”
8. “I must check my pulse and not take the medication if it is less than 60.”
9. “It is okay to keep taking my ginseng.”
10. “I should limit my fluids while taking this medication.”
11. The nurse volunteers at a senior citizen center. The nurse assesses which senior citizen as having the greatest risk of developing heart failure?
12. A 50-year-old black female who smokes
13. A 52-year-old white female with asthma
14. A 69-year-old black male with hypertension
15. A 75-year-old white male who is overweight
16. The client has heart failure and receives digoxin (Lanoxin). Prior to discharge, what will the best teaching plan of the nurse include?
17. “If you miss a dose, take two doses.” – incorrect; this is wrong, and could lead to digoxin toxicity
18. “Report a weight gain of 2 or more pounds per day.” – correct; indicates fluid retention and potentially sequential problems.
19. “Stop the medication if your pulse is 56.” – incorrect; the client would skip the dose with a low pulse rate, but would not stop the medication entirely.
20. “Report mental changes such as euphoria.” – incorrect; not related to this drug
21. Which of the following would lead to an increase in cardiac output?
22. Hypovolemia
23. Increase in preload
24. Peripheral vascular resistance
25. Reduced cardiac contractility
26. Lisinopril (Prinivil) is often used to treat heart failure because it lowers blood volume. Which of the following best explains how lisinopril lowers blood volume?
27. It has an antagonistic effect on angiotensin-converting enzyme.
28. It causes a diuretic effect by lowering the amount of sodium lost in the urine.
29. It causes hypernatremia and increased renal tubule permeability, resulting in a diuretic effect
30. It lowers aldosterone secretion, a hormone that increases sodium reabsorption.
31. The client is being treated for angina. He asks the nurse if angina is the same thing as having a heart attack. What is the best response by the nurse? Select all that apply.
32. “Angina is caused by insufficient oxygen to the myocardium.” – correct; this causes the sx
33. “Severe emotional distress and panic can accompany angina.” – correct; emotions can change CV function (increase cardiac O2 demand) and lead to angina sx
34. “They are basically the same, but with angina, part of your heart dies.” – incorrect; not true
35. “Actually, it depends on what type of angina you mean; there are several types.” – incorrect; I thought this could be correct b/c there are different types, but this is an incorrect response b/c angina and MI are still not the same
36. “A heart attack, or myocardial infarction, means part of your heart has died.” – correct; I originally thought it was incorrect b/c I was thinking about “reversible change”; rehabilitating the part that died.
37. The client is receiving diltiazem (Cardizem) and wants to know why he developed a headache after taking the medication. What is the best response by the nurse?
38. “Diltiazem (Cardizem) causes the blood vessels in your brain to narrow; giving you the headache.”
39. “Diltiazem (Cardizem) causes the blood vessels in your brain to widen; giving you the headache.”
40. “Diltiazem (Cardizem) increases prostaglandin synthesis; giving you the headache.”
41. “Diltiazem (Cardizem) releases Substance P, activating pain receptors in your brain and giving you the headache.”
42. The nurse has completed medication education with the client who is receiving nitroglycerine (Nitrostat) as therapy for angina. The nurse determines that teaching is effective when the client makes which statement?
43. “I can take 3 tablets, one every10 minutes, but not more than3 tablets in 30 minutes.”
44. “I can take 1 tablet every 5 minutes, but not more than 3 tablets in15 minutes.”
45. “I can keep taking tablets until the pain is gone, but I should not use more than 5 tablets.”
46. “I should call my doctor if my pain is not gone after 15 minutes of taking these tablets.”
47. The client says to the nurse, “My neighbor said my antidysrhythmic drug can actually cause me to have irregular heartbeats. How can this be?” What is the nurse’s best answer?
48. “Your medication is not the problem; it is when you mix it with over-the-counter (OTC) drugs that you develop irregular beats.” – incorrect; not necessarily true
49. “Your medication blocks the flow of the electrolytes in your heart, and this can cause irregular beats.” – correct; this is true
50. “You must take two baby aspirins every other day to avoid the irregular heartbeats.” – incorrect; aspirin is usually taken qd, and I don’t believe aspirin affects cardiac rhythm directly.
51. “It is better to discuss you medication concerns with a professional, not a lay person like your neighbor.” – incorrect; B is a better answer, although this is still true.
52. The client receives amiodarone (Cordarone). The nurse would be concerned about which additional medication that a consulting physician might order?
53. Oxycodone (OxyContin)
54. Fluoxetine (Prozac)
55. Omeprazole (Prilosec)
56. Digoxin (Lanoxin)
57. Which of the following statements best explains what happens to cardiac output when the heart rate gets extremely high?
58. Cardiac output will continue to increase as long as the heart rate continues to increase.
59. Cardiac output will increase until the heart rate reaches 150 bpm, at which time it will no longer be affected.
60. Cardiac output lowers when the rapid rate doesn’t allow enough time for complete filling of the heart chambers.
61. Cardiac output is not generally affected by rapid heart rates.
62. Which antidysrhythmic agent also dilates coronary arteries, and is frequently used to treat angina?
63. Procainamide (Pronestyl)
64. Verapamil (Calan)
65. Lidocaine (Xylocaine)
66. Amiodarone (Cordarone)
67. The nurse is teaching a client taking prazosin (Minipress) for hypertension about orthostatic hypotension. The nurse explains this antihypertensive causes vasodilation by:
68. Depleting acetylcholine
69. Stimulating histamine release
70. Blocking the response to norepinephrine
71. Decreasing adrenal release of epinephrine
72. The client is being instructed on the use of nitroglycerin therapy. The nurse should include the importance of: Select all that apply.
73. Limiting the number of tablets to 4 per day – incorrect; client can take more if necessary
74. Discontinuing the medication if a headache develops – incorrect; I originally thought this was correct b/c persistent headaches could be a sign of toxicity
75. Making certain the medication is store in a dark container – correct; the drug is light-sensitive
76. Increasing the number of tablets if dizziness or hypertension occurs – incorrect; these sound like OD sx
77. Discarding the opened container after three months – correct; drug expires 3 mos. after opened
78. The client taking a cardiac glycoside is having her pulse assessed by the nurse. While taking a client’s apical pulse the nurse should place the stethoscope:
79. Just to the left of the median point of the sternum
80. In the fifth intercostal space at the left midclavicular line
81. Between the sixth and seventh ribs at the left midaxillary line
82. Between the third and fourth ribs and to the left of the sternum
83. The client develops a temperature of 102 F after open heart surgery. The nurse notifies the physician because elevated temperatures:
84. Increase the cardiac output
85. May indicate cerebral edema
86. May be a forerunner of hemorrhage
87. Are related to diaphoresis and possible chilling
88. The client is being seen for hypertension education including lifestyle modifications and medication therapy. The nurse should teach the client to stop smoking because nicotine:
89. Constricts the superficial vessels, dilating the deep vessels
90. Constricts the peripheral vessels and increases the force of flow
91. Dilates the superficial vessels but constricts the collateral circulation
92. Dilates the peripheral vessels, causing a reflex constriction of visceral vessels
93. The client with chronic arterial disease presents with an ulceration and gangrenous lesion on the right great toe. The nurse understands this is most likely related to:
94. Emotional stress, which is short lived
95. Poor hygiene and limited protein intake
96. Stimulants such as coffee, tea, or cola drinks
97. Trauma from mechanical, chemical, or thermal sources
98. A client is taking a medication known to cause orthostatic hypotension. When teaching a client about orthostatic hypotension, the nurse should explain it can be modified by:
99. Lying down for 30 minutes after taking medication
100. Sitting on the edge of the bed a short time before arising
101. Wearing support hose continuously
102. Avoiding tasks that require high energy expenditures
103. The client is taking a vasodilator to lower hypertension. The nurse checks the effectiveness of the medication by taking the client’s pulse and blood pressure:
104. Prior to administering the drug – incorrect?; I thought this was correct b/c I read for one of the drugs (I can’t find it again in the text) to check B/P just before administering, to make sure dose is correct and effective for compete duration of time between doses.
105. Thirty minutes after giving the drug – correct?; to check for severe hypotension
106. Immediately after the client gets out of bed – incorrect; but this can be done to check for orthostatic hypotension….
107. After a position is maintained for 5 minutes – incorrect? I just don’t know
108. The client is receiving cholestryamine (Questran). When assessing for side effects, what will be the primary focus of the nurse?
109. Auscultation of heart sounds
110. Auscultation of bowel sounds in all four abdominal quadrants
111. Palpation for peripheral edema in the lower extremities
112. Assessment of 24-hour urine output
113. Which lipid type is associated with the highest risk of atherosclerosis development?
114. Triglycerides – incorrect; I was thinking this was correct since it’s the storage form of lipids.
115. Phospholipids – incorrect; these are mostly used for cell membrane structure
116. Steroids – correct; cholesterol is the biggest contributor/link to atherosclerosis
117. Lecithins – incorrect; type of phospholipids
118. The nurse teaches the client about lisinopril (Prinivil) and evaluates additional teaching is required when the client makes which statement?
119. “I don’t need to worry about having blood tests done.”
120. “I will avoid using salt substitutes for seasoning.”
121. “I will monitor my blood pressure until my next appointment.”
122. “It takes a while for this medication to take effect.”
123. The client receives hydrochlorothiazide (HydroDIURIL). He tells the nurse he is urinating a lot and questions how this drug affects his blood pressure. What is the best response by the nurse?
124. “Hydrochlorothiazide (HydroDIURIL) increases your heart rate; this pumps blood faster to your kidneys so you urinate more and your blood pressure decreases.”
125. “Hydrochlorothiazide (HydroDIURIL) dilates your blood vessels so you urinate more and your blood pressure decreases.”
126. “Hydrochlorothiazide (HydroDIURIL) decreases the fluid in your bloodstream and this lowers your blood pressure.”
127. “Hydrochlorothiazide (HydroDIURIL) enhances kidney function causing you to urinate more and that decreases your blood pressure.”
128. The nurse completed medication education with the client who receives hydrochlorothiazide (HydroDIURIL). The nurse determines teaching has been effective when the client makes which statement?
129. “I need to avoid salt substitutes and potassium-rich foods.” – incorrect; the client should consume these things
130. “If I develop a cough, I should call my doctor.” – incorrect; not related to this drug
131. “I take my medication early in the morning.” – correct; this avoids nocturnal disturbances
132. “I really need to avoid grapefruit juice when I take this medication.” – incorrect; doesn’t apply to this drug
133. The client with hypertension has experienced heart failure. The nurse notes the client is receiving nefedipine (Procardia). What is a priority assessment for the nurse?
134. Auscultate breath sounds for crackles.
135. Review recent lab results for hypokalemia.
136. Assess level of orientation.
137. Assess urinary output.
138. The client has a heart rate of 62. The nurse knows which drug lowers blood pressure by reducing heart rate?
139. Furosemide (Lasix)
140. Hydrochlorothiazide (HCTZ)
141. Atenolol (Tenormin)
142. Nifedipine (Procardia)
143. Digoxin 125 mcg is ordered IV push every AM. The vial from pharmacy contains 0.5 mg in 2 ml. How many mL will you give?
144. A client is ordered 50 mg of Aminophylline intravenously. The pharmacy supplies this medication as 250 milligrams in 10 mL liquid for IV Injection. How many mL will you administer?