

# ANSWERS TO CHAPTER REVIEW QUESTIONS

1. b Digoxin would not reach a steady state until he took it for about a week, unless a loading dose was used. Chances are he is still not therapeutic on his digoxin, and he is accumulating fluid because his heart isn't pumping strongly enough. A therapeutic dose of digoxin would help the heart pump stronger.

2. Thiazide—Chlorothiazide  
Loop—Furosemide  
K-sparing—Triamterene
3. Chronotropic—Rate  
Inotropic—Force of contraction  
Dromotropic—Rhythm
4. e This is why treatment decisions are so difficult. It also explains why athletes occasionally die with no warning.
5. c Hydralazine is a vasodilator. Digoxin is a positive inotrope, and propranolol is used for heart failure to decrease sympathetic overdrive.
6. Patient symptoms, concurrent diseases, and medications, age, family history, tolerance to drugs, and lifestyle are some things to consider when deciding whether to use an antiarrhythmic.
7. ACE inhibitors have been shown to prevent stroke after a myocardial infarction. They also help to prevent recurring MIs.
8. Nitrates are effective for all types of angina because they decrease venous return and decrease cardiac workload. Beta blockers decrease myocardial oxygen demand by decreasing heart rate, blood pressure, and myocardial contractility. Calcium-channel blockers decrease myocardial oxygen demand and increase myocardial blood supply.
9. Antiarrhythmics affect different parts of the action potential. They do this by affecting different ions. The different effects can be seen on an ECG. Side effects are different for different antiarrhythmic drugs.
10. Proarrhythmias are not the opposite of “con” arrhythmias, although the name suggests it. (“Con” arrhythmias don’t exist.) Proarrhythmias—arrhythmias induced by antiarrhythmics—can be induced by antiarrhythmic drugs and may make the problems worse.