

# EKG Competency for Agency

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Agency: \_\_\_\_\_

1. The upper chambers of the heart are known as the:
  - a. Atria
  - b. Ventricles
  - c. Mitral Valve
  - d. Aortic Valve
2. The lower chambers of the heart are known as the:
  - a. Atria
  - b. Ventricles
  - c. Mitral Valve
  - d. Aortic Valve
3. Slide #2 - the letter A designates:
  - a. Tricuspid Valve
  - b. Pulmonary Valve
  - c. Mitral Valve
  - d. Aortic Valve
4. Slide #2 - the letter B designates:
  - a. Tricuspid Valve
  - b. Pulmonic Valve
  - c. Mitral Valve
  - d. Aortic Valve
5. Slide #2 - the letter C designates:
  - a. Tricuspid Valve
  - b. Pulmonic Valve
  - c. Mitral Valve
  - d. Aortic Valve
6. Slide #2 - the letter D designates:
  - a. Tricuspid Valve
  - b. Pulmonic Valve
  - c. Mitral Valve
  - d. Aortic Valve
7. What type of blood vessels carries blood away from the heart?
  - a. Artery
  - b. Vein
8. What type of blood vessels carries blood to the heart?
  - a. Artery
  - b. Vein
9. Cardiac muscle tissue receives its blood supply from the:
  - a. Pulmonary arteries
  - b. Coronary arteries
  - c. Myocardial arteries
  - d. Coronary veins

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10. The P wave represents the depolarization of both the right and left:
  - a. Ventricles
  - b. Atria and ventricles
  - c. Valves
  - d. Atria
11. The normal PR interval measures:
  - a. 0.04 to 0.12 second
  - b. 0.04 to 0.18 second
  - c. 0.12 to 0.20 second
  - d. 0.20 to 0.28 second
12. The measurement of a normal QRS complex is:
  - a. 0.14 to 0.16 second
  - b. 0.12 to 0.20 second
  - c. 0.18 to 0.24 second
  - d. 0.04 to 0.12 second
13. The T wave represents:
  - a. Depolarization of the ventricles
  - b. Repolarization of the atria
  - c. Polarization of the cardiac cells
  - d. Repolarization of the ventricles
14. Unstable angina is defined as:
  - a. Chest pain that usually starts with physical exertion and is relieved by rest.
  - b. A decreased amount of oxygen available to the tissue cells, due to decreased blood supply.
  - c. Death of part of the cardiac muscle caused by a blockage in on or more of the coronary arteries.
  - d. Chest pain that is not relieved with rest or nitroglycerin; usually lasts longer than 30 minutes.
15. A Myocardial Infarction is defined as:
  - a. Chest pain that usually starts with physical exertion and is relieved by rest.
  - b. A decreased amount of oxygen available to the tissue cells, due to decreased blood supply.
  - c. Death of part of the cardiac muscle caused by a blockage in on or more of the coronary arteries.
  - d. Chest pain that is not relieved with rest or nitroglycerin; usually lasts longer than 30 minutes.
16. Stable angina is defined as:
  - a. Chest pain that usually starts with physical exertion and is relieved by rest.
  - b. A decreased amount of oxygen available to the tissue cells, due to decreased blood supply.
  - c. Death of part of the cardiac muscle caused by a blockage in on or more of the coronary arteries.
  - d. Chest pain that is not relieved with rest or nitroglycerin; usually lasts longer than 30 minutes.
17. Ischemia is defined as:
  - a. Chest pain that usually starts with physical exertion and is relieved by rest.
  - b. A decreased amount of oxygen available to the tissue cells, due to decreased blood supply.

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- c. Death of part of the cardiac muscle caused by a blockage in on or more of the coronary arteries.
  - d. Chest pain that is not relieved with rest or nitroglycerin; usually lasts longer than 30 minutes.
18. Slide #3 – What is the PR Interval:
- a. .18 seconds
  - b. .24 seconds
  - c. .20 seconds
  - d. .30 seconds
19. Slide #3 – What is the QRS Interval:
- a. .6 seconds
  - b. .10 seconds
  - c. .12 seconds
  - d. 0.6 seconds
20. Slide #3 – What is the Rhythm:
- a. Normal Sinus Rhythm
  - b. Sinus Bradycardia
  - c. Junctional Tachycardia
  - d. Atrial Fibrillation
21. Slide #3 – What is the heart rate:
- a. 100 BPM
  - b. 80 BPM
  - c. 60 BPM
  - d. 90 BPM
22. Slide #4 – What is the Rhythm:
- a. Sinus Tachycardia
  - b. Sinus with PACs
  - c. Wandering Atrial Pacemaker
  - d. Junctional Tachycardia
23. Slide #4 – What is the heart rate:
- a. 90-100 BPM
  - b. 70-80 BPM
  - c. 100-100 BPM
  - d. 80-90 BPM
24. Slide #5 – What is the Rhythm:
- a. Sinus Bradycardia
  - b. 2<sup>nd</sup> Degree Heart Block Type I
  - c. 2<sup>nd</sup> Degree Heart Block Type II
  - d. Ideoventricular
25. Slide #5 – What is the heart rate:
- a. 20 BPM
  - b. 40 BPM
  - c. 10 BPM
  - d. 30 BPM
26. Slide #6 – What is the Rhythm:
- a. 2<sup>nd</sup> Degree Heart Block Type I
  - b. 2<sup>nd</sup> Degree Heart Block Type II
  - c. Sinus Arrhythmia

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- d. Sinus Bradycardia
- 27. Slide #6 – What is the heart rate:
  - a. 60 BPM
  - b. 50 BPM
  - c. 70 BPM
  - d. 40 BPM
- 28. Slide #7 – What is the Rhythm:
  - a. Sinus Bradycardia
  - b. Idioventricular
  - c. 2<sup>nd</sup> Degree Heart Block Type II
  - d. 3<sup>rd</sup> Degree Heart Block
- 29. Slide #7 – What is the heart rate:
  - a. 60 BPM
  - b. 20 BPM
  - c. 70 BPM
  - d. 40 BPM
- 30. Slide #8 – What is the Rhythm:
  - a. Ventricular Tachycardia
  - b. 2<sup>nd</sup> Degree Heart Block Type II
  - c. Normal Sinus with PJC
  - d. Normal Sinus with PVC
- 31. Slide #8 - What is the heart rate:
  - a. 70 BPM
  - b. 60 BPM
  - c. 90 BPM
  - d. 100 BPM
- 32. Slide #9 – What is the Rhythm:
  - a. Supraventricular Tachycardia
  - b. Junctional Tachycardia
  - c. Sinus Tachycardia with 1<sup>st</sup> Degree AV Block
  - d. Normal Sinus
- 33. Slide #9 – What is the heart rate:
  - a. 120 BPM
  - b. 90 BPM
  - c. 110 BPM
  - d. 130 BPM
- 34. Slide #10 – What is the Rhythm:
  - a. Normal Sinus with a 1<sup>st</sup> Degree AV Block
  - b. Normal Sinus
  - c. Junctional Tachycardia
  - d. Supraventricular Tachycardia

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35. Slide #10 – What is the PR Interval:
- .20 seconds
  - .26 seconds
  - .28 seconds
  - .32 seconds
36. Slide #11 – What is the Rhythm:
- Slow Ventricular Tachycardia
  - Sinus Bradycardia with a 1<sup>st</sup> Degree AV Block
  - 3<sup>rd</sup> Degree Heart Block
  - Idioventricular
37. Slide #11 - What is the heart rate:
- 40 BPM
  - 60 BPM
  - 35 BPM
  - 50 BPM
38. Slide #12 – What is the Rhythm
- Atrial Fibrillation
  - Atrial Tachycardia
  - Atrial Flutter
  - Ventricular Flutter
39. Slide #12 – What is the rate of P waves to QRS complexes:
- 4:1
  - 5:1
  - 3:1
  - 2:1
40. Slide #13 – What the Rhythm:
- Ventricular Fibrillation
  - Sinus Arrhythmia
  - Atrial Fibrillation
  - Junctional Arrhythmia
41. Slide #13 - What is the heart rate:
- 60 BPM
  - 70 BPM
  - 80 BPM
  - 100 BPM
42. Slide #14 – What is the Rhythm:
- Ventricular Tachycardia
  - Supraventricular Tachycardia
  - Sinus Tachycardia
  - Junctional Tachycardia
43. Slide #14 – What is the heart rate:
- 210 BPM
  - 160 BPM
  - 170 BPM
  - 190 BPM

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44. Slide #15 – What is the Rhythm:
  - a. Ventricular Tachycardia
  - b. Supraventricular Tachycardia
  - c. Sinus Tachycardia
  - d. Junctional Tachycardia
45. Slide #15 – What is the heart rate:
  - a. 220 BPM
  - b. 160 BPM
  - c. 170 BPM
  - d. 190 BPM
46. Slide #16 – What is the Rhythm:
  - a. Atrial Fibrillation
  - b. Atrial Flutter
  - c. Normal Sinus with Artifact
  - d. Junctional Tachycardia
47. Slide #16 – What is the heart rate:
  - a. 90 BPM
  - b. 80 BPM
  - c. 70 BPM
  - d. 100 BPM
48. Slide #17 – What is the Rhythm:
  - a. Artifact
  - b. Ventricular Fibrillation
  - c. Ventricular Tachycardia
  - d. Wide QRS Supraventricular Tachycardia
49. Slide #17 – This Rhythm is
  - a. Monomorphic
  - b. Polymorphic
50. Slide #18 – What is the Rhythm:
  - a. Artifact
  - b. Ventricular Fibrillation
  - c. Ventricular Tachycardia
  - d. Wide QRS Supraventricular Tachycardia
51. Slide #19 – What is the Rhythm:
  - a. Wide QRS Bradycardia
  - b. Junctional Bradycardia
  - c. Idioventricular
  - d. Sinus Bradycardia
52. Slide #19 – What is the heart Rate:
  - a. 70 BPM
  - b. 40 BPM
  - c. 60 BPM
  - d. 50 BPM
53. Slide #20 – What is the Rhythm
  - a. Normal Sinus with Blocked PAC
  - b. Pacing with a compensatory pause
  - c. Pacing with 1 Failure to Capture
  - d. Ventricular Tachycardia

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## 54. Atropine Sulfate:

- a. Decreases heart rate by depressing the SA node and AV node activity
- b. Increases heart rate and sinus node automaticity; improves AV conduction
- c. Decreases heart rate by altering impulses through conduction pathways; slows conduction; prolongs effective refractory period

## 55. Epinephrine Hydrochloride:

- a. Decreases heart rate by slowing conduction of the AV node and by lengthening the refractory periods. Decreases blood pressure by dilating coronary arteries
- b. Reduces ventricular dysrhythmias that may follow an MI
- c. Increases heart rate and force of cardiac contractions; increases coronary and cerebral blood flow.

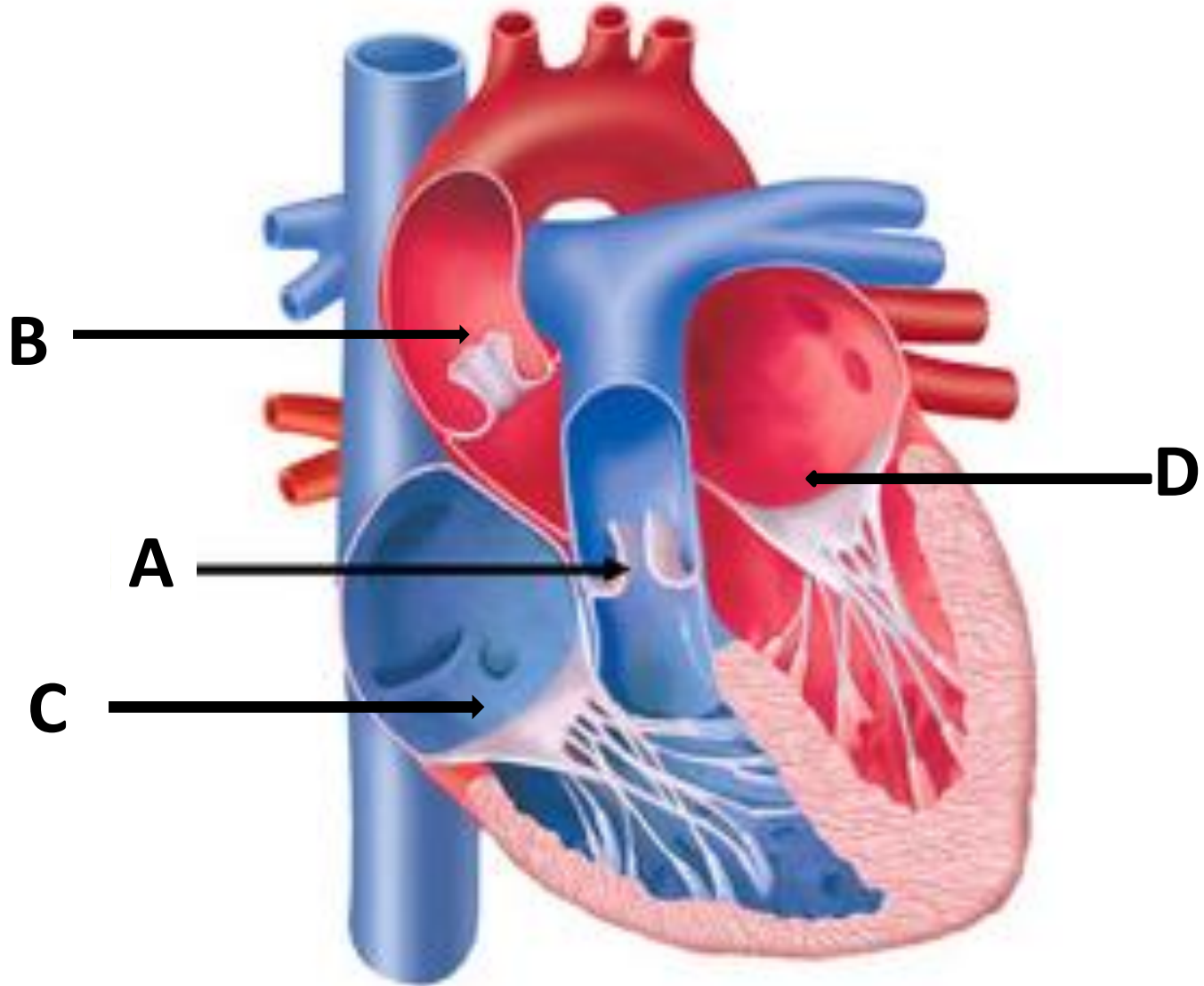
# EKG Competency for New Hires

The following slides correspond to questions on the test. Please refer back to these slides when completing the test.

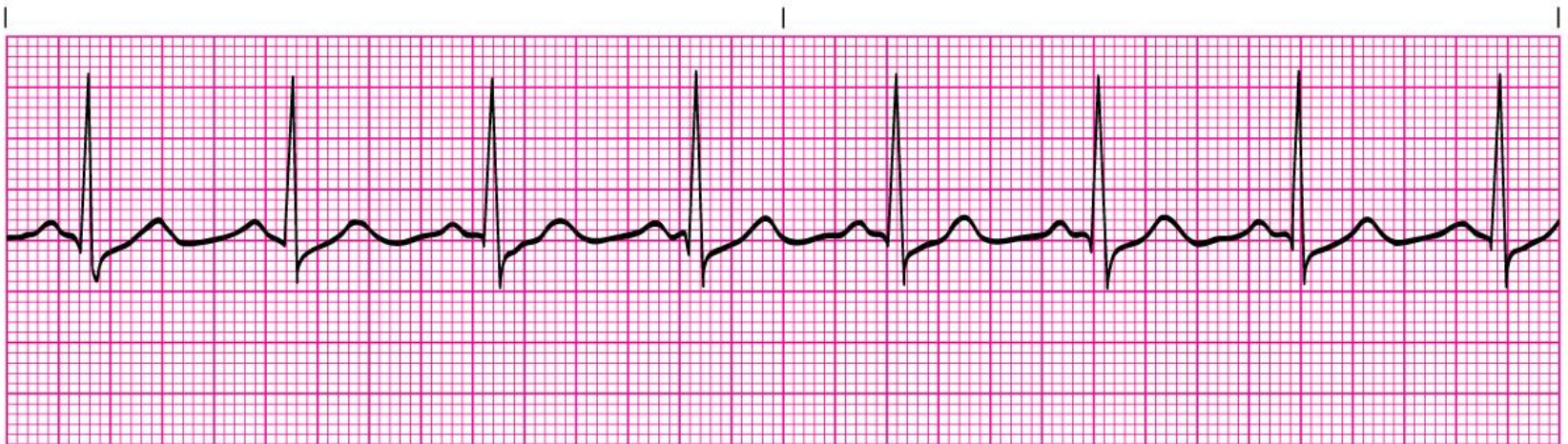
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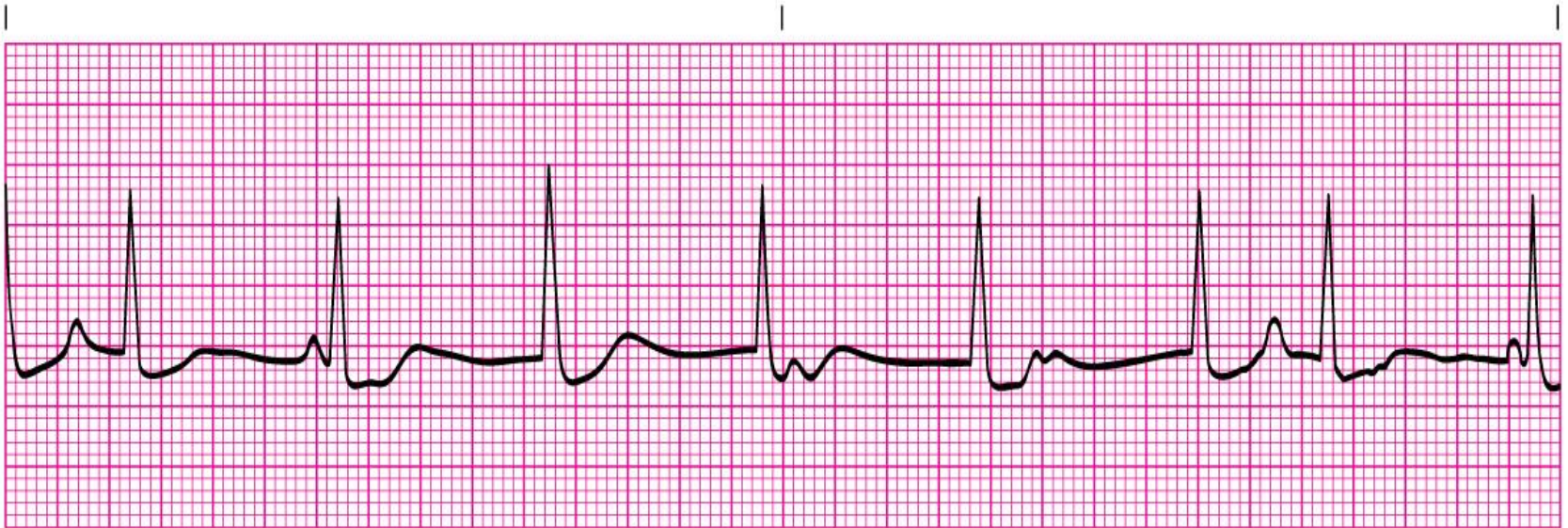
# Question #3-6



# Question #18-21

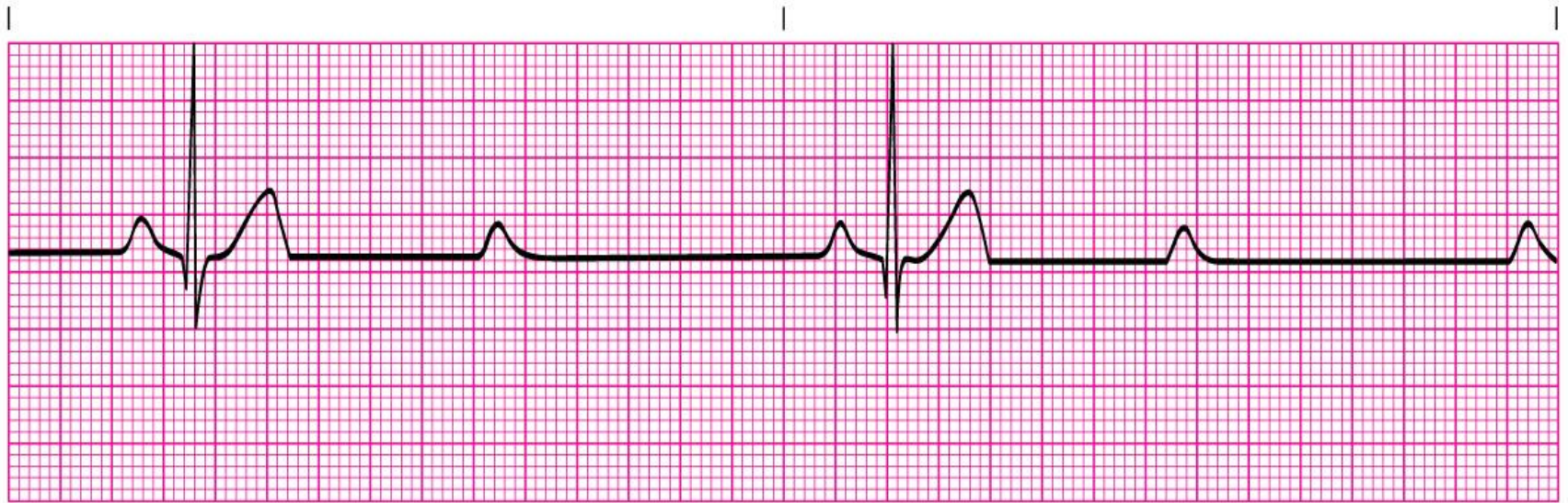


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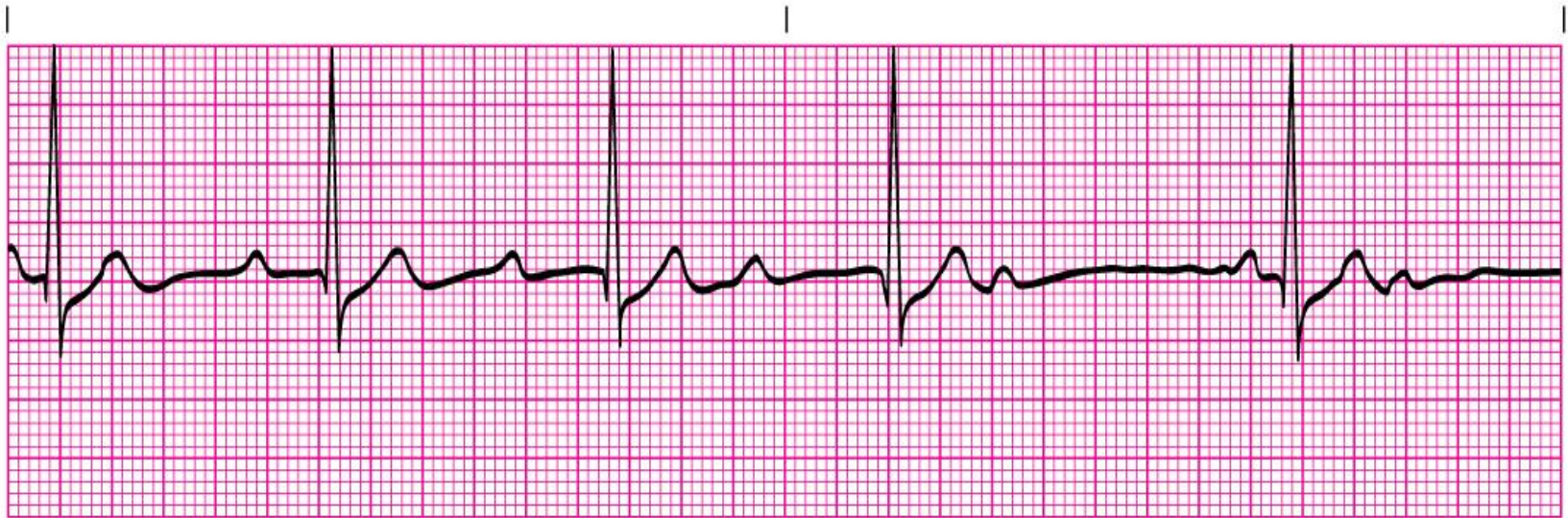




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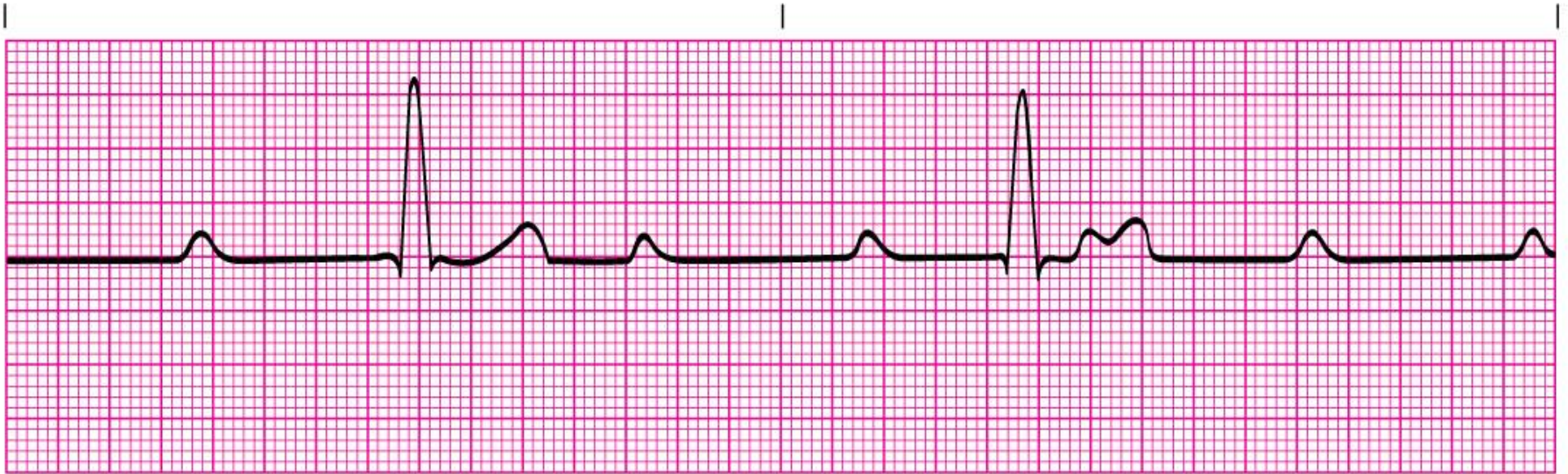


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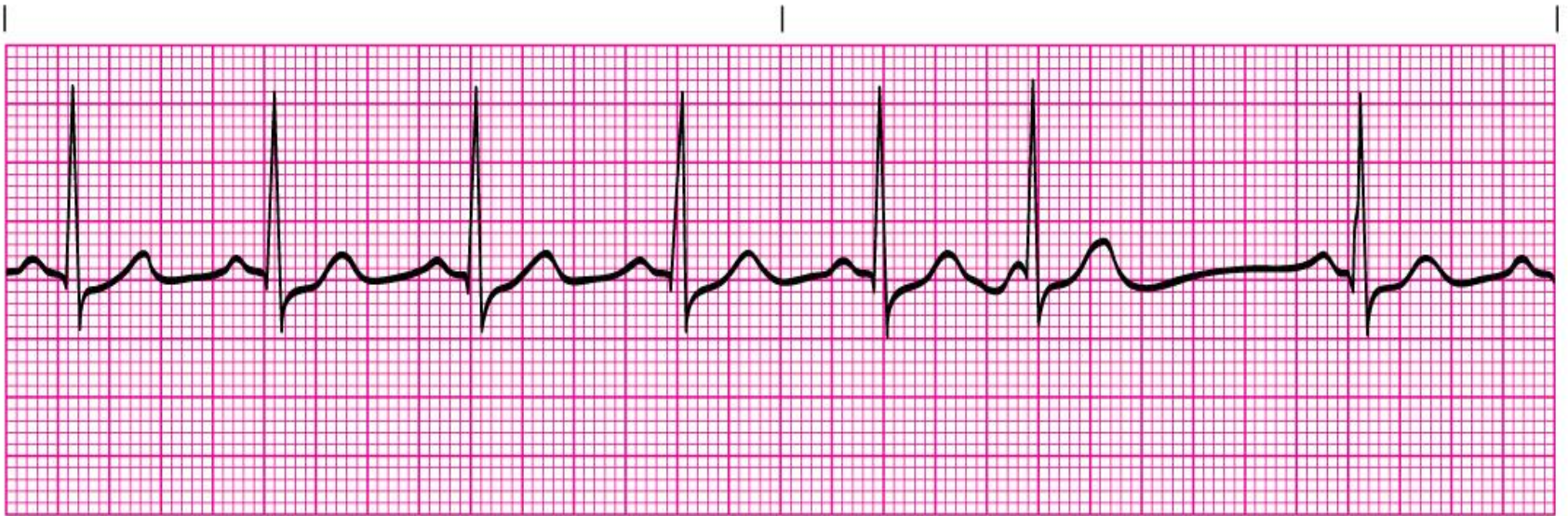




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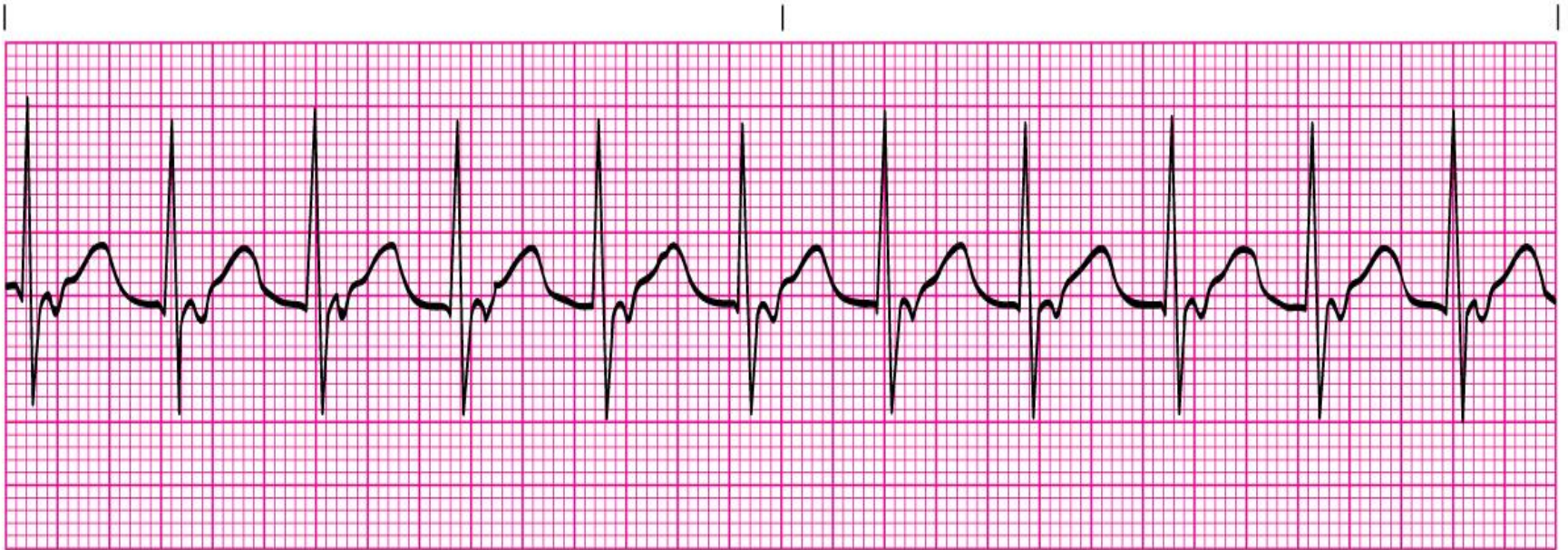


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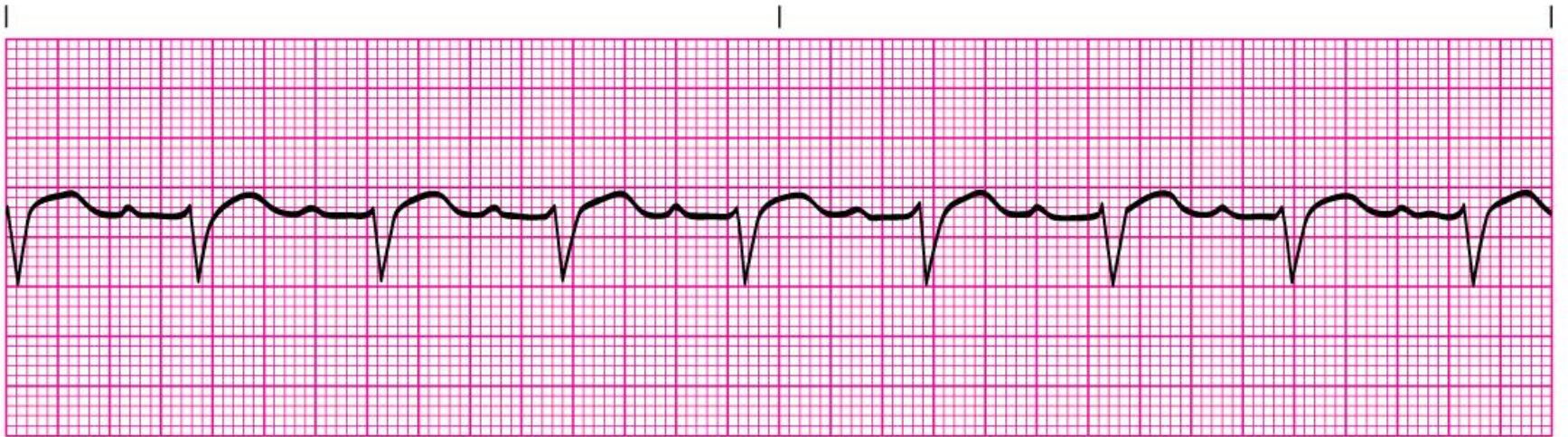


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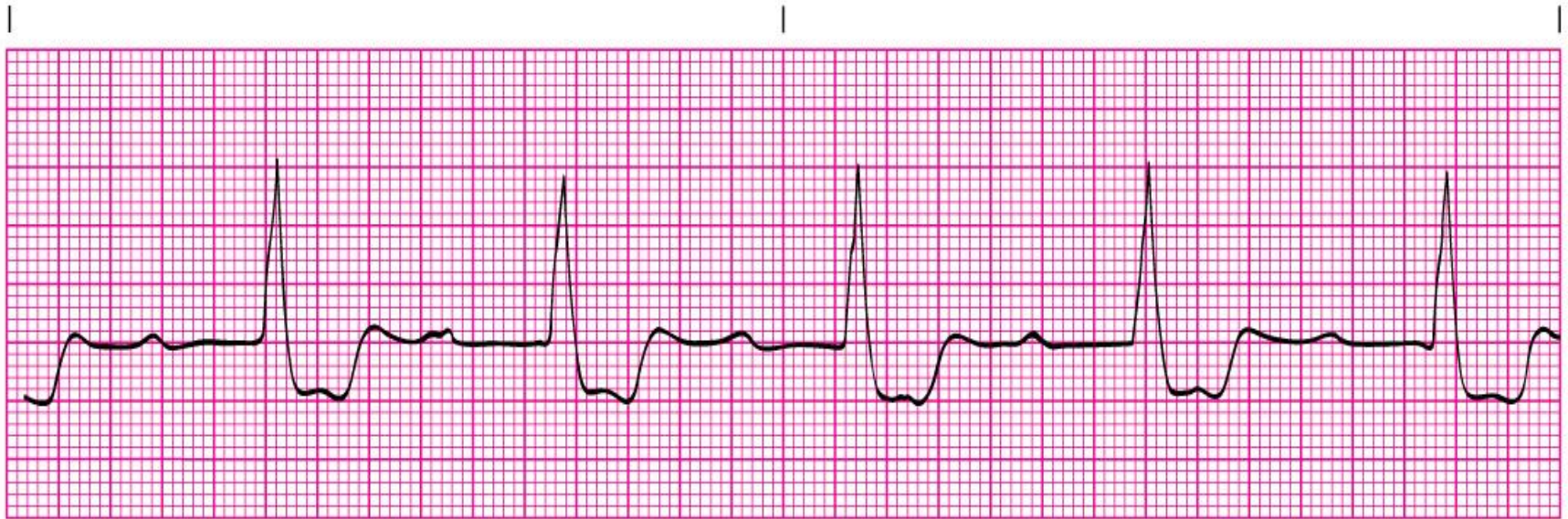




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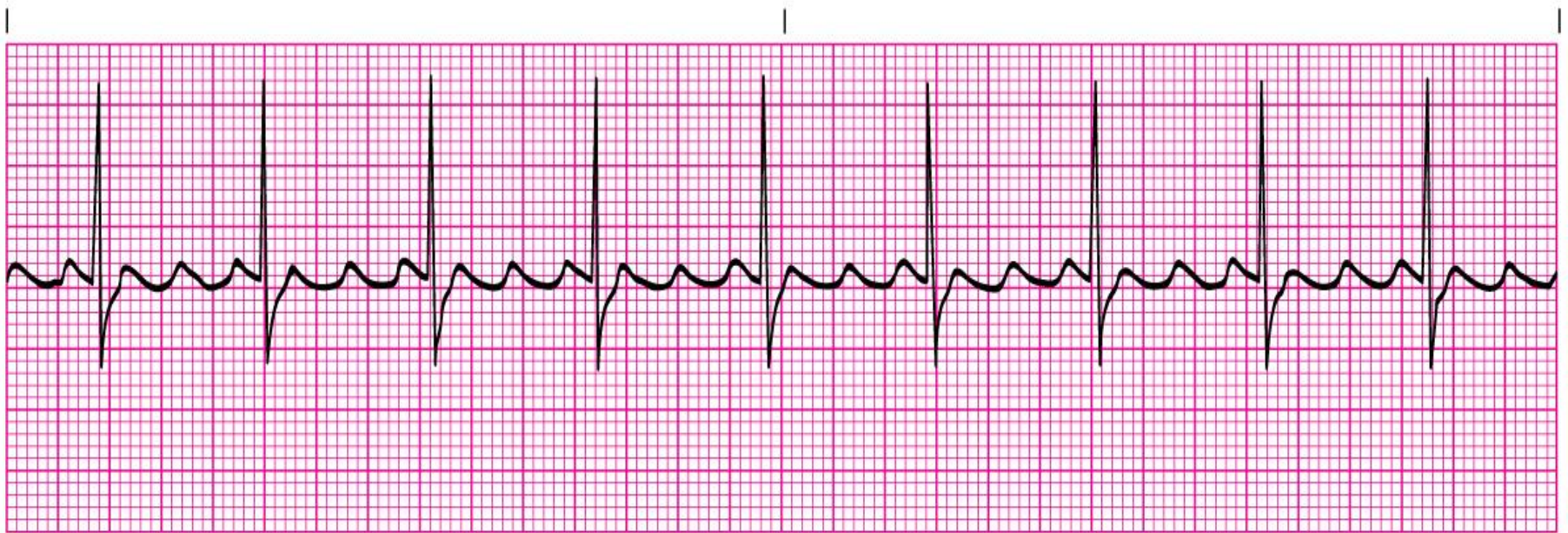


# Question #36-37





# Question #38-39

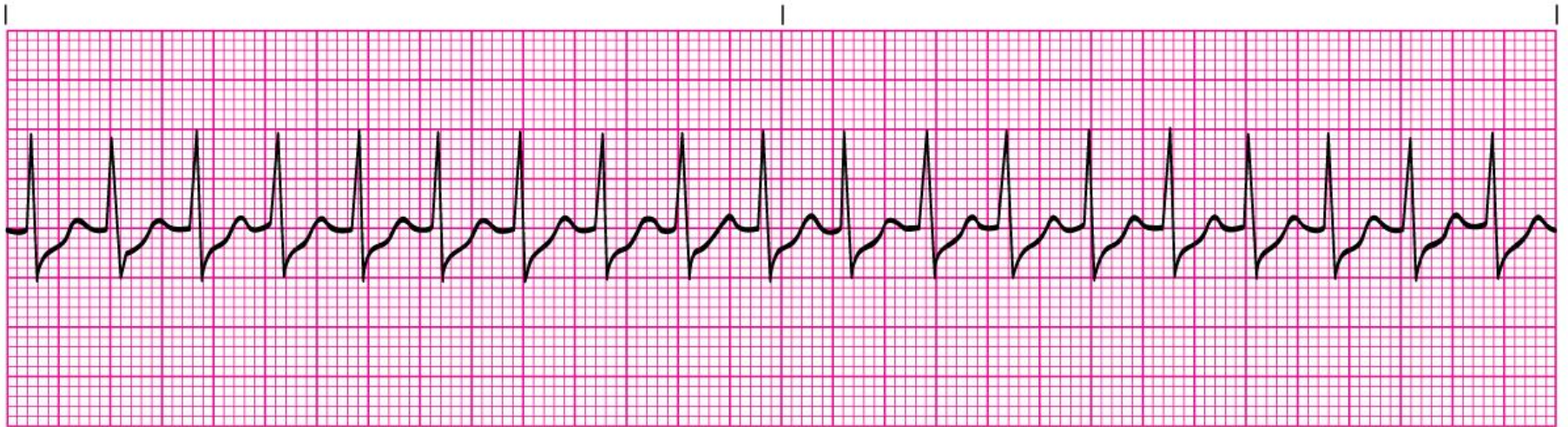


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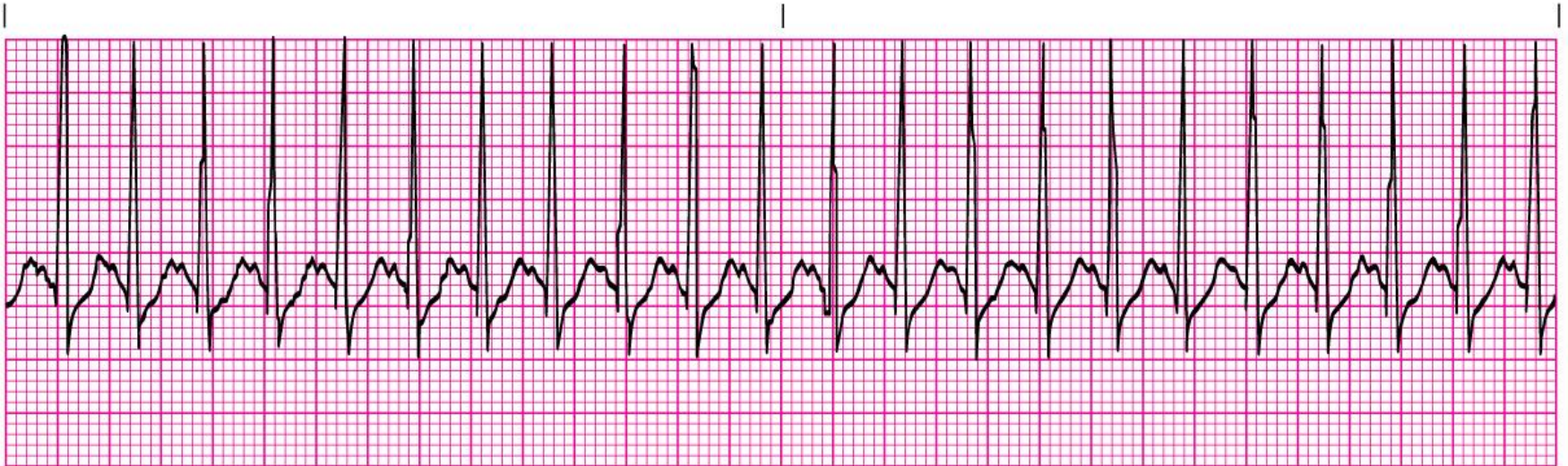




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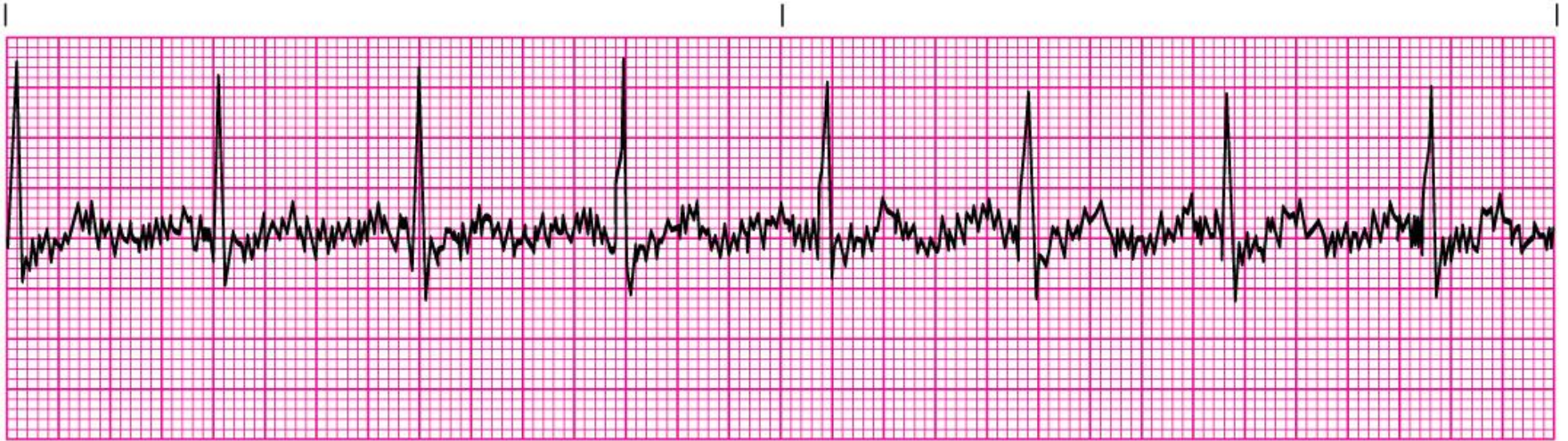


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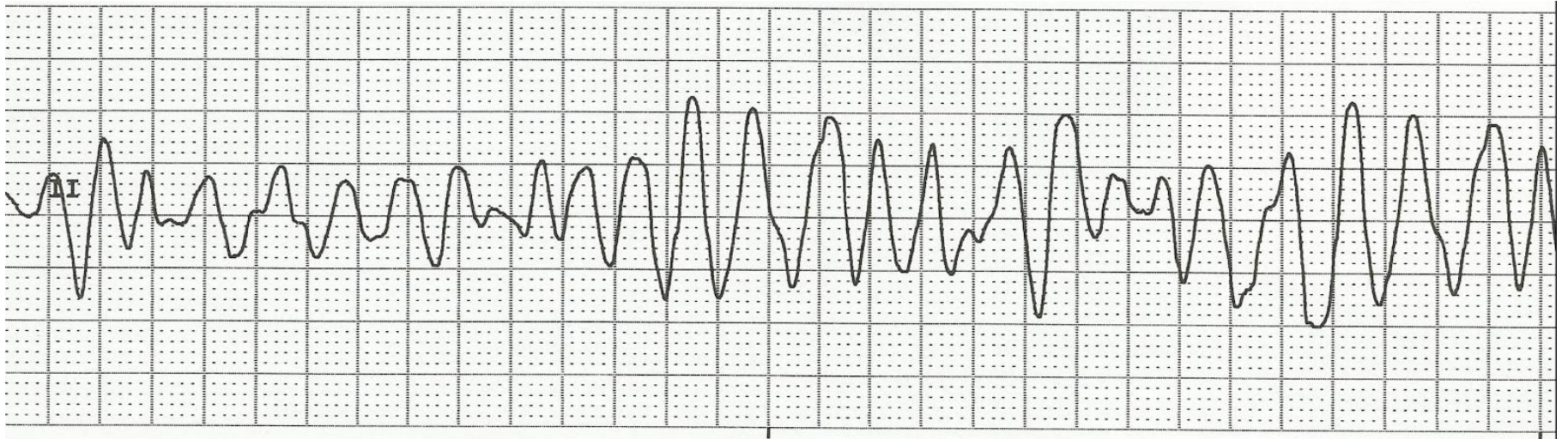




# Question #46-47



# Question #48-49





# Question #50



# Question #51-52



# Question #53

