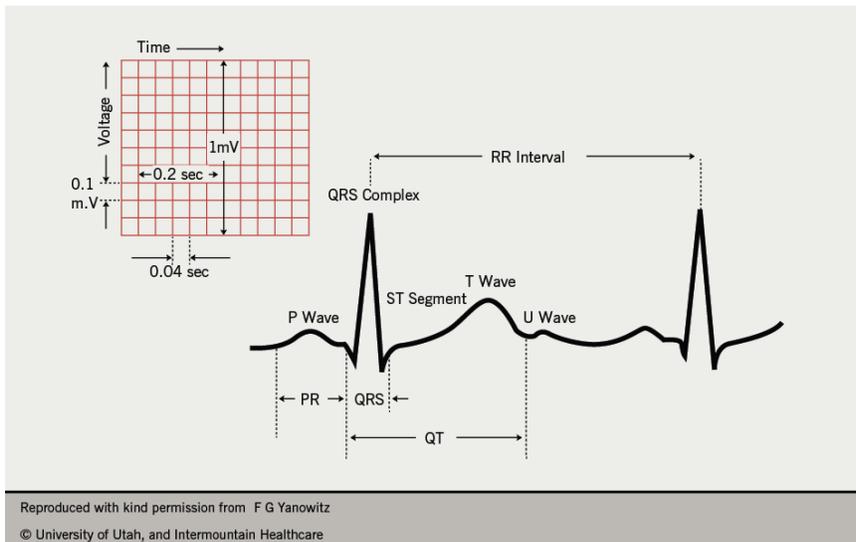
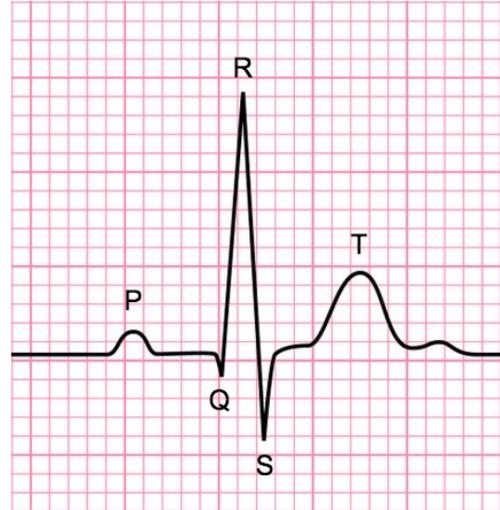
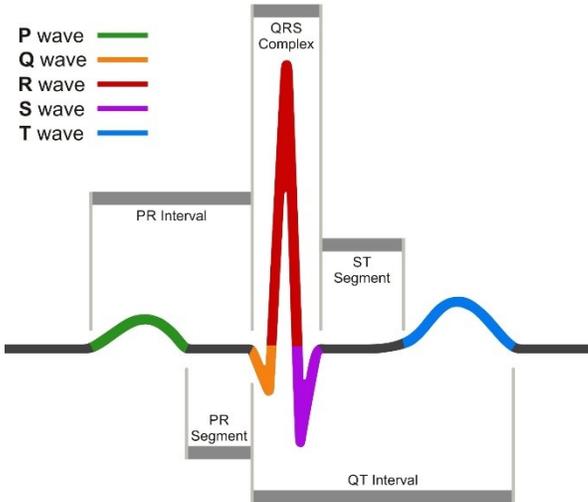


The EKG waveform consists of:

- P Wave: Represents atrial depolarization
- QRS: Represents ventricular depolarization
- T Wave: Represents ventricular repolarization



- 1 small square on an ECG trace (at 25 mm/s speed) = 0.04 s
- PR interval 0.11–0.20 seconds (3–5 small squares)
- QRS complex 0.06–0.10 seconds (1.5–2.5 small squares)
- QT interval 0.36–0.44 (9–11 small squares).

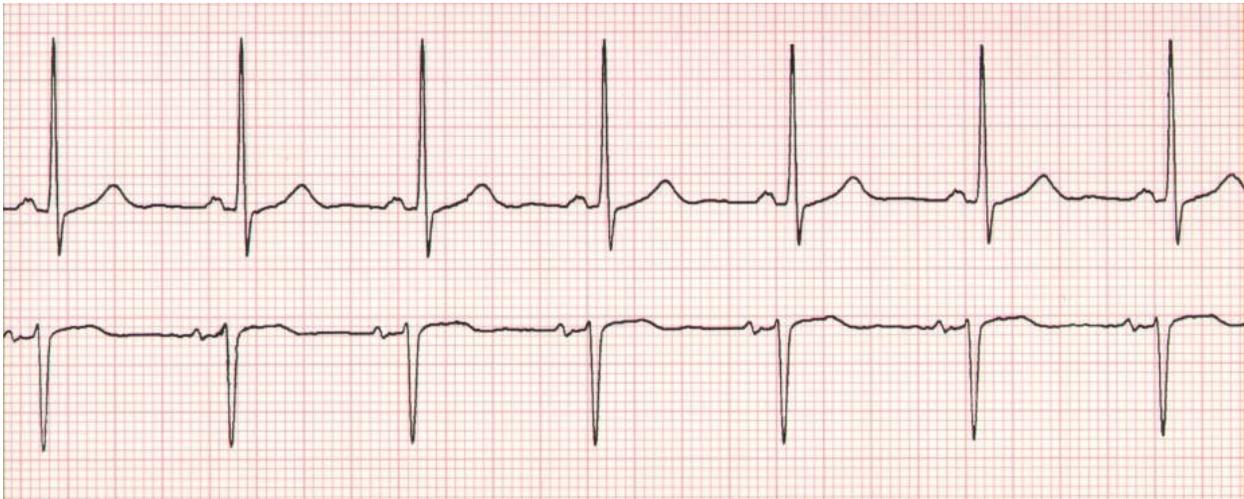
Six Basic Steps for Rhythm Interpretation

1. Rate: (Calculate the heart rate (HR) or note the HR from the monitor)
2. Regularity: (Measure the regularity or rhythm of the R waves)
3. P-wave Examination: Is there one P wave before each QRS? (there should be)
4. P to R Interval: (Measure the P to R interval - Is it within normal limits? It is consistent?)
5. QRS Width: (Measure the duration of the QRS complex)
6. Rhythm Interpretation

N321 Adult Health EKG Practice

Please determine heart rate, irregular or regular rhythm, P wave before QRS, PR interval, QRS interval

Then answer if Normal sinus rhythm, Sinus Bradycardia, Sinus Tachycardia, Asystole



1. Heart Rate 70 Regular or irregular regular P wave before each QRS yes

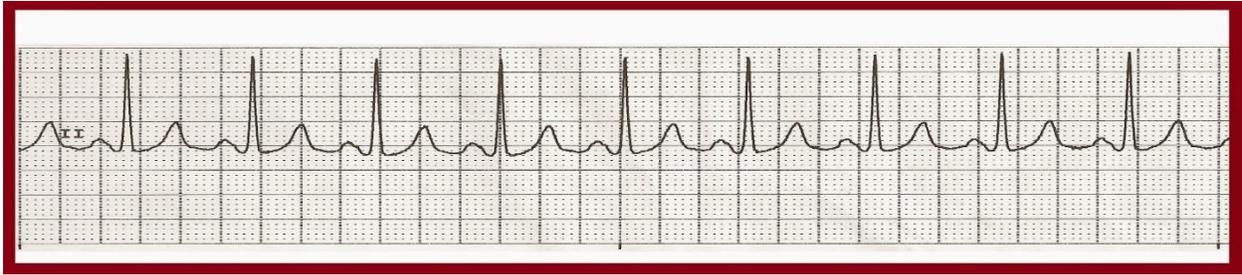
Between PR (0.12-0.20) 0.12 QRS 0.04-0.10 0.08

Answer: normal sinus rhythm

HR: $7 \times 10 = 70$

PR: $0.04 \times 3 = 0.12$

QRS: $0.04 \times 2 = 0.08$



2. Heart Rate 90 Regular or irregular regular P wave before each QRS yes

Between PR (0.12-0.20) 0.12 QRS 0.04-0.10 0.10

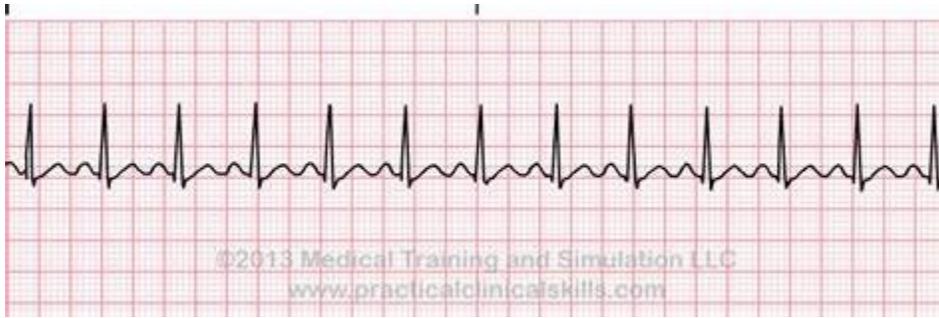
Answer: normal sinus rhythm



3. Heart Rate 30 Regular or irregular regular P wave before each QRS no

Between PR (0.12-0.20) 0.12 QRS 0.04-0.10 0.12

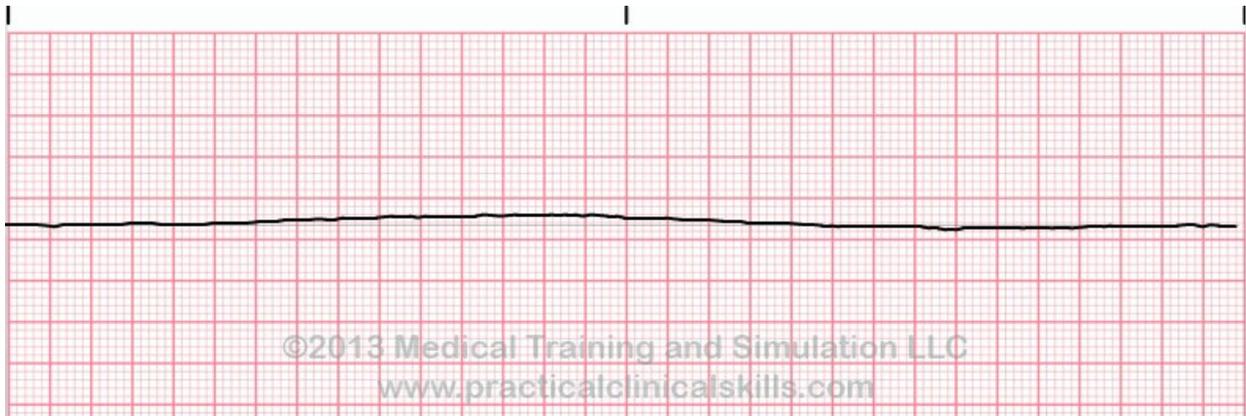
Answer: sinus bradycardia



4. Heart Rate 130 Regular or irregular regular P wave before each QRS yes

Between PR (0.12-0.20) 0.12 ORS 0.04-0.10 0.08

Answer: sinus tachycardia



5. Heart Rate 0 Regular or irregular irregular P wave no

Answer: asystole



6. Heart Rate 40 Regular or irregular regular P wave before each QRS yes

Between PR (0.12-0.20) 0.12 ORS 0.04-0.10 0.10

Answer: sinus bradycardia



7. Heart Rate 140 Regular or irregular regular P wave before each QRS yes

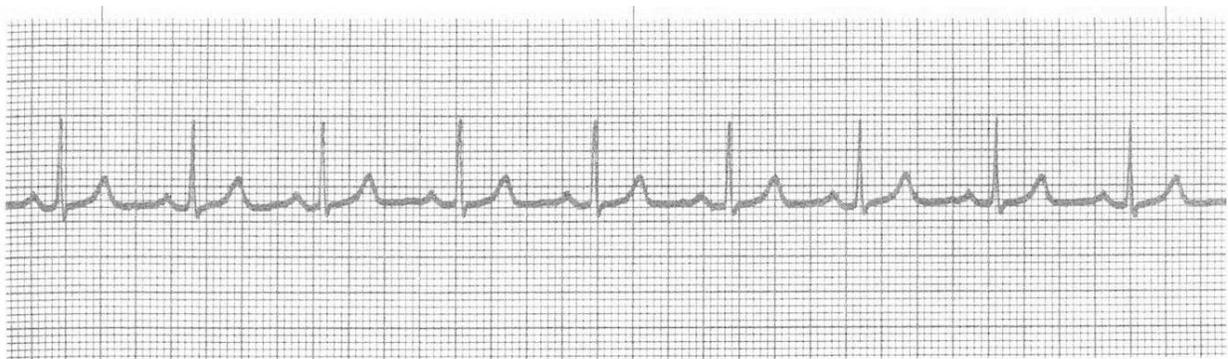
Between PR (0.12-0.20) 0.16 ORS 0.04-0.10 0.10

Answer: sinus tachycardia



8. Heart Rate 100 Regular or irregular irregular P wave
no

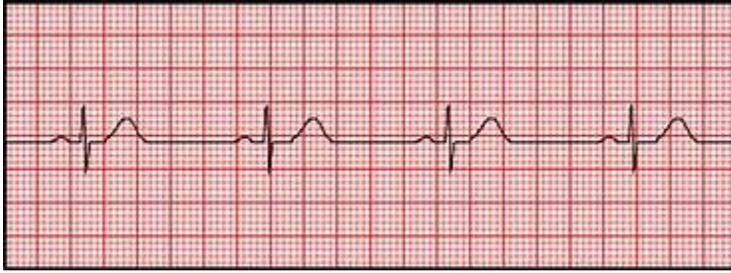
Answer: asystole



9. Heart Rate 90 Regular or irregular regular P wave
 before each QRS yes

Between PR (0.12-0.20) 0.12 QRS 0.04-0.10 0.08

Answer: normal sinus



10. Heart Rate 40 Regular or irregular regular P wave before each QRS yes

Between PR (0.12-0.20) QRS 0.04-0.10 0.08

Answer: sinus bradycardia