

### Strip 10-33

Automatic interval rate: 65  
 Analysis: First two beats are paced beats followed by two patient beats, one fusion beat and two paced beats  
 Interpretation: Normal pacemaker function

### Strip 10-34

Automatic interval rate: 72  
 Analysis: All beats are pacemaker induced  
 Interpretation: Pacemaker rhythm

### Strip 10-35

Automatic interval rate: 56  
 Analysis: The first two beats are paced beats followed by one patient beat, one paced beat, one patient beat, one paced beat that occurs too early, two paced beats, and one patient beat  
 Interpretation: Undersensing malfunction

### \* Strip 11-1

Rhythm: Regular  
 Rate: 107  
 P waves: Sinus P waves are present  
 PR interval: 0.12 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Sinus tachycardia

### Strip 11-2

Rhythm: Regular  
 Rate: 58  
 P waves: Sinus P waves are present  
 PR interval: 0.12 to 0.14 seconds  
 QRS: 0.12 seconds  
 Rhythm interpretation: Sinus bradycardia with bundle branch block; ST segment depression is present

### Strip 11-3

Rhythm: Regular atrial and ventricular rhythm  
 Rate: Atrial: 42; Ventricular: 21  
 P waves: Two sinus P waves to each QRS  
 PR interval: 0.32 to 0.36 seconds (remain constant)  
 QRS: 0.12 seconds  
 Rhythm interpretation: Second-degree AV block, Mobitz II; clinical correlation is suggested to diagnose Mobitz II when 2:1 conduction is present; ST segment elevation is present

### Strip 11-4

Rhythm: Irregular  
 Rate: 100  
 P waves: Fibrillatory waves are present—some flutter waves are seen mixed with the fibrillatory waves  
 PR interval: Not measurable  
 QRS: 0.04 seconds  
 Rhythm interpretation: Atrial fibrillation; ST segment depression is present

### Strip 11-5

Rhythm: Regular  
 Rate: 48  
 P waves: Hidden in QRS  
 PR interval: Not measurable  
 QRS: 0.08 seconds  
 Rhythm interpretation: Junctional rhythm; ST segment depression is present

### Strip 11-6

Rhythm: Regular  
 Rate: 188  
 P waves: Hidden in preceding T waves  
 PR interval: Not measurable  
 QRS: 0.10 seconds  
 Rhythm interpretation: Paroxysmal atrial tachycardia

### Strip 11-7

Automatic interval rate: 72  
 Analysis: First four beats are paced followed by two patient beats, one paced beat, and two patient beats  
 Rhythm interpretation: Normal pacemaker function

### Strip 11-8

Rhythm: Regular atrial and ventricular rhythm  
 Rate: Atrial: 75; Ventricular: 26  
 P waves: Sinus P waves present—bear no constant relationship to QRS complexes  
 PR interval: Varies  
 QRS: 0.14–0.16 seconds  
 Rhythm interpretation: Third-degree AV block; ST segment elevation is present

### Strip 11-9

Rhythm: Regular  
 Rate: 188  
 P waves: Not discernible  
 PR interval: Not discernible  
 QRS: 0.16 to 0.20 seconds  
 Rhythm interpretation: Ventricular tachycardia

**Strip 11-10**

Rhythm: Regular  
 Rate: 42  
 P waves: Absent  
 PR interval: Not measurable  
 QRS: 0.16 seconds  
 Rhythm interpretation: Idioventricular rhythm

**Strip 11-11**

Rhythm: Basic rhythm regular  
 Rate: Basic rhythm rate 56  
 P waves: Sinus P waves present (appear notched which may indicate left atrial hypertrophy)  
 PR interval: 0.16 seconds  
 QRS: 0.06 seconds (basic rhythm); 0.16 seconds (PVC)  
 Rhythm interpretation: Sinus bradycardia with one interpolated PVC; ST segment depression is present

**Strip 11-12**

Rhythm: Regular  
 Rate: 84  
 P waves: Inverted before each QRS  
 PR interval: 0.10 seconds  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Accelerated junctional rhythm

**Strip 11-13**

Rhythm: Regular  
 Rate: Atrial: 232; Ventricular: 58  
 P waves: Four flutter waves before each QRS  
 PR interval: Not measurable  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Atrial flutter with 4:1 AV conduction

**Strip 11-14**

Rhythm: Regular  
 Rate: 88  
 P waves: Sinus  
 PR interval: 0.20 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Normal sinus rhythm

**Strip 11-15**

Rhythm: Regular  
 Rate: 88  
 P waves: Absent  
 PR interval: Not measurable  
 QRS: 0.14–0.16 seconds  
 Rhythm interpretation: Accelerated idioventricular rhythm

**Strip 11-16**

Rhythm: Basic rhythm regular; irregular with pause  
 Rate: Basic rhythm 75  
 P waves: Sinus P waves present with basic rhythm; one premature, abnormal P wave with QRS (after 5th QRS)  
 PR interval: 0.24 to 0.28 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Normal sinus rhythm with first-degree AV block and one nonconducted PAC (follows 5th QRS)

**Strip 11-17**

Rhythm: Regular  
 Rate: 115  
 P waves: Sinus P waves are present  
 PR interval: 0.14 to 0.16 seconds  
 QRS: 0.06 seconds  
 Rhythm interpretation: Sinus tachycardia

**Strip 11-18**

Rhythm: Regular  
 Rate: 48  
 P waves: Sinus  
 PR interval: 0.12 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Sinus bradycardia; ST segment elevation is present

**Strip 11-19**

Rhythm: Basic rhythm regular; irregular with premature beats  
 Rate: Basic rhythm rate 72  
 P waves: Sinus with basic rhythm; inverted with premature beats  
 PR interval: 0.12–0.14 seconds (basic rhythm); 0.08 seconds (premature beats)  
 QRS: 0.08 seconds  
 Rhythm interpretation: Normal sinus rhythm with two premature junctional contractions (4th and 6th complexes)

**Strip 11-20**

Rhythm: Regular  
 Rate: 63  
 P waves: Vary in size, shape, and position  
 PR interval: 0.12 to 0.14 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Wandering atrial pacemaker; ST segment depression is present

**Strip 11-21**

Rhythm: Chaotic  
 Rate: 0 (no QRS complexes)  
 P waves: No P waves; wave deflections are chaotic, irregular and vary in height, size, and shape  
 PR interval: Not measurable  
 QRS: Absent  
 Rhythm interpretation: Ventricular fibrillation

**Strip 11-22**

Rhythm: Regular  
 Rate: 107  
 P waves: Inverted before each QRS  
 PR interval: 0.08 seconds  
 QRS: 0.04 to 0.06 seconds  
 Rhythm interpretation: Junctional tachycardia

**Strip 11-23**

Rhythm: Irregular atrial rhythm  
 Rate: Atrial, 40; ventricular, 0  
 P waves: Sinus P waves are present  
 PR interval: Not measurable  
 QRS: Absent  
 Rhythm interpretation: Ventricular standstill

**Strip 11-24**

Rhythm: Irregular  
 Rate: 70  
 P waves: Sinus  
 PR interval: 0.44–0.48 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Sinus arrhythmia with first degree AV block; ST segment elevation is present

**Strip 11-25**

Rhythm: Regular  
 Rate: 188  
 P waves: Not discernible  
 PR interval: Unmeasurable  
 QRS: 0.16 to 0.20 seconds  
 Rhythm interpretation: Ventricular tachycardia; ST segment elevation is present

**Strip 11-26**

Rhythm: Atrial: regular; Ventricular: irregular  
 Rate: Atrial (72); Ventricular (40)  
 P waves: Sinus  
 PR interval: Lengthens from 0.20–0.28 seconds  
 QRS: 0.04–0.06 seconds  
 Rhythm interpretation: Second degree AV block, Mobitz I; ST segment depression is present

**Strip 11-27**

Rhythm: Regular  
 Rate: 72  
 P waves: Sinus  
 PR interval: 0.20 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Normal sinus rhythm; ST segment depression and T wave inversion is present

**Strip 11-28**

Rhythm: Basic rhythm regular; irregular with pause  
 Rate: Basic rhythm 72 (rate slows to 63 during first cycle following pause; rate suppression can occur for several cycles following an interruption in the basic rhythm)  
 P waves: Sinus P waves are present  
 PR interval: 0.16 to 0.18 seconds  
 QRS: 0.04 to 0.06 seconds  
 Rhythm interpretation: Normal sinus rhythm with sinus arrest

**Strip 11-29**

Rhythm: Basic rhythm regular; irregular with premature beats  
 Rate: Basic rhythm rate 63  
 P waves: Sinus with basic rhythm; premature, pointed P wave with premature beat  
 PR interval: 0.14–0.16 (basic rhythm); 0.12 seconds (Premature beat)  
 QRS: 0.08 seconds  
 Rhythm interpretation: Normal sinus rhythm with one PAC (5th complex)

**Strip 11-30**

Rhythm: Basic rhythm regular; irregular with PVCs  
 Rate: Basic rhythm rate 72  
 P waves: Sinus P waves are present  
 PR interval: 0.12 to 0.14 seconds  
 QRS: 0.12 seconds (basic rhythm and PVCs)  
 Rhythm interpretation: Normal sinus rhythm with bundle branch block and paired PVCs; a U wave is present

**Strip 11-31**

Rhythm: Atrial: regular; Ventricular: regular  
 Rate: Atrial: 240; Ventricular: 60  
 P waves: 4 Flutter waves to each QRS  
 PR interval: Not measurable  
 QRS: 0.04–0.06 seconds  
 Rhythm interpretation: Atrial flutter with 4:1 AV conduction

**Strip 11-32**

Rhythm: Basic rhythm regular; irregular with pause  
Rate: Basic rhythm rate 54  
P waves: Sinus with basic rhythm; no P waves with 4th and 5th complexes  
PR interval: 0.18–0.20 seconds (basic rhythm)  
QRS: 0.06–0.08 seconds  
Rhythm interpretation: Sinus bradycardia with sinus arrest and 2 junctional escape beats during pause

**Strip 11-33**

Rhythm: Regular  
Rate: 25  
P waves: None identified  
PR interval: Not measurable  
QRS: 0.24 seconds or greater  
Rhythm interpretation: Idioventricular rhythm

**Strip 11-34**

Automatic interval rate: 63  
Analysis: The first three beats are paced beats followed by a pacing spike that doesn't capture, one patient beat, and 2 paced beats  
Rhythm interpretation: Failure to capture

**Strip 11-35**

Rhythm: Regular  
Rate: 84  
P waves: Not identified  
PR interval: Not measurable  
QRS: 0.12–0.14 seconds  
Rhythm interpretation: Accelerated idioventricular rhythm

**Strip 11-36**

Rhythm: Chaotic  
Rate: 0  
P waves: Absent; wave deflections are chaotic, irregular and vary in size, shape, and height  
PR interval: Not measurable  
QRS: Absent  
Rhythm interpretation: Ventricular fibrillation followed by electrical shock and return to ventricular fibrillation

**Strip 11-37**

Rhythm: Regular  
Rate: 52  
P waves: Sinus P waves are present  
PR interval: 0.18 to 0.20 seconds  
QRS: 0.06 to 0.08 seconds  
Rhythm interpretation: Sinus bradycardia; a U wave is present

**Strip 11-38**

Rhythm: Regular  
Rate: 94  
P waves: Inverted before each QRS  
PR interval: 0.08–0.10 seconds  
QRS: 0.08 seconds  
rhythm interpretation: Accelerated junctional rhythm; baseline artifact is present

**Strip 11-39**

Rhythm: Irregular  
Rate: 60  
P waves: Fibrillatory waves are present  
PR interval: Not measurable  
QRS: 0.12 seconds  
Rhythm interpretation: Atrial fibrillation with bundle branch block; ST segment depression and T wave inversion are present

**Strip 11-40**

Automatic interval rate: 72  
Analysis: All beats are pacemaker induced  
Rhythm interpretation: Pacemaker rhythm

**Strip 11-41**

Rhythm: P waves occur regularly  
Rate: Atrial: 88; Ventricular: 0  
P waves: P waves present  
PR interval: Not measurable  
QRS: Absent  
Rhythm interpretation: Ventricular standstill

**Strip 11-42**

Rhythm: Basic rhythm regular; irregular with premature beats  
Rate: Basic rhythm rate 63  
P waves: Sinus with basic rhythm  
PR interval: 0.12–0.14 seconds  
QRS: 0.08 seconds (basic rhythm); 0.12–0.16 seconds (PVCs)  
Rhythm interpretation: Normal sinus rhythm with paired multifocal PVCs (4th, 5th complexes)

**Strip 11-43**

Rhythm: Basic rhythm regular; irregular with PAC  
Rate: Basic rhythm rate 136  
P waves: Sinus with basic rhythm; premature pointed P waves with premature beats  
PR interval: 0.16–0.20 seconds  
QRS: 0.06–0.08 seconds  
Rhythm interpretation: Sinus tachycardia with 2 PACs (4th and 8th complexes)



**Strip 11-44**

Rhythm: Basic rhythm regular; irregular with pause  
 Rate: Basic rhythm rate 84—rate slows after pause but returns to basic rate after 4 cycles  
 P waves: Sinus  
 PR interval: 0.20 seconds  
 QRS: 0.08 seconds  
 Rhythm interpretation: Normal sinus rhythm with sinus arrest; ST segment depression and T wave inversion are present

**Strip 11-45**

Rhythm: 0  
 Rate: 0  
 P waves: No P waves present; pacing spikes seen  
 PR interval: Not measurable  
 QRS: No QRS complexes are present  
 Rhythm interpretation: Failure to capture in presence of ventricular standstill (asystole)

**Strip 11-46**

Automatic interval rate: 72  
 Analysis: First four beats are paced beats, followed by one patient beat, a pacing spike that occurs too early, a patient beat, a fusion beat, and two paced beats  
 Rhythm interpretation: Sensing malfunction

**Strip 11-47**

Rhythm: Regular  
 Rate: 42  
 P waves: Hidden in QRS  
 PR interval: Not measurable  
 QRS: 0.08 to 0.10 seconds  
 Rhythm interpretation: Junctional rhythm

**Strip 11-48**

Rhythm: Atrial: regular; Ventricular: irregular  
 Rate: Atrial: 79; Ventricular: 50  
 P waves: Sinus P waves present  
 PR interval: Lengthens from 0.20–0.32 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Second degree AV block Mobitz I

**Strip 11-49**

Rhythm: Basic rhythm regular; irregular with premature beat  
 Rate: 107  
 P waves: Inverted before each QRS (except 9th QRS which has a premature, pointed P wave)  
 PR interval: 0.08–0.10 seconds (basic rhythm); 0.10 seconds (premature beat)  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Junctional tachycardia with one PAC (9th complex)

**Strip 11-50**

Rhythm: Regular atrial and ventricular rhythm  
 Rate: Atrial: 84; Ventricular: 28  
 P waves: Sinus P waves are present; bear no relationship to QRS complexes  
 PR interval: Varies greatly  
 QRS: 0.12 seconds  
 Rhythm interpretation: Third degree AV block; ST segment depression is present

**Strip 11-51**

Rhythm: Irregular  
 Rate: 50  
 P waves: Sinus P waves are present  
 PR interval: 0.12 to 0.14 seconds  
 QRS: 0.08 seconds  
 Rhythm interpretation: Sinus arrhythmia; sinus bradycardia; a U wave is present

**Strip 11-52**

Rhythm: Basic rhythm regular; irregular with premature beats  
 Rate: Basic rhythm rate 72  
 P waves: Sinus with basic rhythm  
 PR interval: 0.16 seconds  
 QRS: 0.10 seconds  
 Rhythm interpretation: Normal sinus rhythm with unifocal PVCs in a trigeminal pattern. ST segment depression and T wave inversion are present

**Strip 11-53**

Rhythm: Regular  
 Rate: Atrial 93; ventricular 31  
 P waves: 3 sinus P waves to each QRS (one hidden in T wave)  
 PR interval: 0.36 seconds (remains constant)  
 QRS: 0.08 seconds  
 Rhythm interpretation: Second-degree AV block, Mobitz II

**Strip 11-54**

Rhythm: Basic rhythm regular; irregular with PVCs  
 Rate: Basic rhythm rate 72  
 P waves: Sinus P waves present with basic rhythm  
 PR interval: 0.12 to 0.14 seconds  
 QRS: 0.08 seconds (basic rhythm); 0.14–0.16 seconds (PVCs)  
 Rhythm interpretation: Normal sinus rhythm with multifocal PVCs

**Strip 11-55**

Rhythm: Regular atrial and ventricular rhythm  
 Rate: Atrial: 62; Ventricular: 31  
 P waves: Two sinus P waves before each QRS  
 PR interval: 0.44 seconds (remains constant)  
 QRS: 0.14–0.16 seconds  
 Rhythm interpretation: Second degree AV block  
 Mobitz II

**Strip 11-56**

Rhythm: Regular  
 Rate: 65  
 P waves: Inverted before each QRS  
 PR interval: 0.10 seconds  
 QRS: 0.04 seconds  
 Rhythm interpretation: Accelerated junctional  
 rhythm; ST segment elevation is present

**Strip 11-57**

Rhythm: Basic rhythm regular; irregular with pause  
 Rate: Basic rhythm rate 68  
 P waves: Sinus P waves  
 PR interval: 0.22–0.24 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Normal sinus rhythm with  
 first degree AV block and sinus arrest; ST segment  
 elevation is present

**Strip 11-58**

Automatic Interval Rate: Cannot be determined for sure  
 since there are no two consecutive paced beats or two  
 consecutive pacing spikes (estimated to be 75 when  
 measured from beat immediately preceding each spike)  
 Analysis: All beats are patient beats—four pacing  
 spikes appear at appropriate intervals for capture to  
 occur but capture doesn't occur  
 Rhythm interpretation: Complete failure to capture

**Strip 11-59**

Rhythm: Regular  
 Rate: 188  
 P waves: Not identified  
 PR interval: Not measurable  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Paroxysmal atrial tachycardia

**Strip 11-60**

Rhythm: Irregular  
 Rate: 30  
 P waves: None present  
 PR interval: Not measurable  
 QRS: 0.16 seconds  
 Rhythm interpretation: Idioventricular rhythm;  
 ST segment depression is present

**Strip 11-61**

Rhythm: Atrial: regular; Ventricular: irregular  
 Rate: Atrial: 125; Ventricular: 80  
 P waves: Sinus  
 PR interval: Lengthens from 0.12–0.24 seconds  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Second degree AV block  
 Mobitz I; T wave inversion is present

**Strip 11-62**

Rhythm: Basic rhythm regular; irregular with  
 nonconducted PAC  
 Rate: Basic rhythm rate 100  
 P waves: Sinus P waves present; two premature  
 abnormal P waves without QRS (following 4th and  
 8th complexes)  
 PR interval: 0.12 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Normal sinus rhythm with two  
 nonconducted PACs; T wave inversion is present

**Strip 11-63**

Rhythm: Regular  
 Rate: 75  
 P waves: Sinus  
 PR interval: 0.16–0.18 seconds  
 QRS: 0.12–0.14 seconds  
 Rhythm interpretation: Normal sinus rhythm with  
 bundle branch block; ST segment elevation is present

**Strip 11-64**

Rhythm: Regular  
 Rate: 50  
 P waves: Sinus  
 PR interval: 0.16 seconds  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Sinus bradycardia; a  
 U wave is present

**Strip 11-65**

Automatic Interval rate: 72  
 Analysis: All beats are pacemaker induced  
 Rhythm interpretation: Pacemaker rhythm

**Strip 11-66**

Rhythm: Regular  
 Rate: Atrial, 78; ventricular, 39  
 P waves: Two sinus P waves to each QRS complex  
 PR interval: 0.24 with a constant relationship to the  
 QRS complexes  
 QRS: 0.12 to 0.14 seconds  
 Rhythm interpretation: Second-degree AV block,  
 Mobitz II. Clinical correlation is suggested to  
 diagnose Mobitz II when 2 : 1 conduction is present

**Strip 11-67**

Rhythm: Basic rhythm regular  
 Rate: Basic rhythm rate: 54  
 P waves: Sinus P waves with basic rhythm; no  
 P waves seen with 3rd, 4th complexes  
 PR interval: 0.20 seconds  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Sinus bradycardia with two  
 junctional escape beats (3rd, 4th beat)

**Strip 11-68**

Rhythm: Irregular and chaotic  
 Rate: 0  
 P waves: Absent  
 PR interval: Unmeasurable  
 QRS: Absent  
 Rhythm interpretation: Loss of pacemaker capture  
 in the presence of ventricular fibrillation

**Strip 11-69**

Rhythm: Regular  
 Rate: 115  
 P waves: Inverted before each QRS  
 PR interval: 0.08 to 0.10 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Junctional tachycardia

**Strip 11-70**

Rhythm: Basic rhythm regular; irregular with PJC  
 Rate: Basic rhythm rate 58  
 P waves: Sinus P waves present (basic rhythm);  
 inverted P waves with PJC  
 PR interval: 0.14 to 0.16 seconds (basic rhythm);  
 0.10 seconds (PJC)  
 QRS: 0.08 seconds  
 Rhythm interpretation: Sinus bradycardia with  
 one PJC

**Strip 11-71**

Rhythm: Basic rhythm regular; irregular with  
 nonconducted PAC  
 Rate: Basic rhythm rate 63  
 P waves: Sinus P waves (basic rhythm); one  
 premature, abnormal P wave without QRS complex  
 (follows 4th complex)  
 PR interval: 0.28 to 0.32 seconds  
 QRS: 0.12 seconds  
 Rhythm interpretation: Normal sinus rhythm with  
 first-degree AV block and bundle branch block  
 with one nonconducted PAC following 4th QRS;  
 ST segment elevation and T wave inversion are  
 present

**Strip 11-72**

Rhythm: Basic rhythm regular; irregular with PVC  
 Rate: Basic rate: 50  
 P waves: Sinus with basic rhythm  
 PR interval: 0.12–0.14 seconds  
 QRS: 0.08 seconds (basic rhythm); 0.18 seconds (PVC)  
 Rhythm interpretation: Sinus bradycardia with one  
 PVC (follows 3rd QRS); ST segment elevation is  
 present

**Strip 11-73**

Automatic interval rate: 79  
 Analysis: First two beats are paced beats followed by  
 one fusion beat, one pseudofusion beat (note spike at  
 beginning of R wave), three patient beats, pacing  
 spike that occurs too early, a patient beat followed by  
 a pacing spike that occurs too early, and another  
 patient beat followed by an early pacing spike  
 Rhythm interpretation: Sensing malfunction

**Strip 11-74**

Rhythm: Regular  
 Rate: 50  
 P waves: None identified  
 PR interval: Not measurable  
 QRS: 0.04–0.06 seconds  
 Rhythm interpretation: Junctional rhythm; ST  
 segment depression and T wave inversion is present

**Strip 11-75**

Rhythm: Irregular atrial rhythm  
 Rate: Atrial: 40 ventricular 0  
 P waves: Sinus P waves are present  
 PR interval: Not measurable  
 QRS: Absent  
 Rhythm interpretation: Ventricular standstill

**Strip 11-76**

Rhythm: Irregular  
 Rate: 60  
 P waves: Sinus  
 PR interval: 0.12–0.14 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Sinus arrhythmia;  
 ST segment elevation is present

**Strip 11-77**

Rhythm: Regular  
 Rate: 68  
 P waves: P waves vary in size, shape, position  
 PR interval: 0.14 to 0.16 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Wandering atrial  
 pacemaker; T wave inversion is present

**Strip 11-78**

Rhythm: Regular  
 Rate: 214  
 P waves: Hidden  
 PR interval: Not measurable  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Paroxysmal atrial tachycardia

**Strip 11-79**

Rhythm: First rhythm regular; second rhythm regular  
 Rate: 94 (first rhythm); 136 (second rhythm)  
 P waves: Sinus P waves (first rhythm)  
 PR interval: 0.18 to 0.20 seconds (first rhythm)  
 QRS: 0.06 to 0.08 seconds (first rhythm); 0.12 seconds (second rhythm)  
 Rhythm interpretation: Normal sinus rhythm changing to ventricular tachycardia

**Strip 11-80**

Rhythm: Basic rhythm regular  
 Rate: Basic rhythm rate 107  
 P waves: Sinus with basic rhythm  
 PR interval: 0.14–0.16 seconds  
 QRS: 0.06–0.08 seconds (basic rhythm); 0.12 seconds (ventricular beats)  
 Rhythm interpretation: Sinus tachycardia with a four-beat burst of ventricular tachycardia and paired, unifocal PVCs

**Strip 11-81**

Rhythm: Irregular  
 Rate: Atrial, 260; ventricular, 70  
 P waves: Flutter waves present  
 PR interval: Not measurable  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Atrial flutter with variable block

**Strip 11-82**

Rhythm: Regular  
 Rate: 88  
 P waves: Sinus  
 PR interval: 0.12 seconds  
 QRS: 0.04–0.06 seconds  
 Rhythm interpretation: Normal sinus rhythm

**Strip 11-83**

Automatic interval rate: 63  
 Analysis: First two beats are paced beats followed by one patient beat, two paced beats, one patient beat, and two paced beats  
 Rhythm interpretation: Normal pacemaker function

**Strip 11-84**

Rhythm: Regular  
 Rate: 136  
 P waves: Sinus  
 PR interval: 0.12–0.14 seconds  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Sinus tachycardia

**Strip 11-85**

Rhythm: Regular  
 Rate: 54  
 P waves: Sinus  
 PR interval: 0.24–0.26 seconds  
 QRS: 0.04–0.06 seconds  
 Rhythm interpretation: Sinus bradycardia with first degree AV block

**Strip 11-86**

Rhythm: Regular atrial and ventricular rhythm  
 Rate: Atrial: 94; Ventricular: 37  
 P waves: Sinus P waves present—bear no relationship to QRS complexes  
 PR interval: Varies  
 QRS: 0.12–0.14 seconds  
 Rhythm interpretation: Third degree AV block

**Strip 11-87**

Rhythm: Regular  
 Rate: 150  
 P waves: None identified  
 PR interval: Not measurable  
 QRS: 0.12–0.14 seconds  
 Rhythm interpretation: Ventricular tachycardia

**Strip 11-88**

Rhythm: Basic rhythm regular; irregular with pause  
 Rate: Basic rhythm rate: 56  
 P waves: Sinus with basic rhythm; absent during pause  
 PR interval: 0.16–0.18 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Sinus bradycardia with sinus arrest; ST segment depression and T wave inversion are present

**Strip 11-89**

Rhythm: 0  
 Rate: 0  
 P waves: Absent  
 PR interval: Not measurable  
 QRS: Absent  
 Rhythm interpretation: Ventricular standstill

**Strip 11-90**

Rhythm: Regular  
 Rate: 88  
 P waves: Sinus  
 PR interval: 0.16 seconds  
 QRS: 0.06–0.08 seconds  
 Rhythm interpretation: Normal sinus rhythm;  
 ST segment depression and T wave inversion are present

**Strip 11-91**

Rhythm: Basic rhythm regular; irregular with PVC  
 Rate: 115 (basic rhythm)  
 P waves: Inverted before each QRS  
 PR interval: 0.08 to 0.10 seconds  
 QRS: 0.04 to 0.06 seconds; 0.12 (premature beat)  
 Rhythm interpretation: Junctional tachycardia with one premature ventricular contraction

**Strip 11-92**

Rhythm: Regular  
 Rate: 188  
 P waves: Hidden in T waves  
 PR interval: Not measurable  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Paroxysmal atrial tachycardia; ST segment depression is present

**Strip 11-93**

Rhythm: Chaotic  
 Rate: 0  
 P waves: Absent—fibrillatory waves present  
 PR interval: Not measurable  
 QRS: Absent  
 Rhythm interpretation: Ventricular fibrillation

**Strip 11-94**

Rhythm: Irregular  
 Rate: 80  
 P waves: Vary in size, shape, and position  
 PR interval: 0.14 to 0.16 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Wandering atrial pacemaker; T wave inversion is present

**Strip 11-95**

Rhythm: Regular  
 Rate: 100  
 P waves: Inverted before each QRS  
 PR interval: 0.08 seconds  
 QRS: 0.06 to 0.08 seconds  
 Rhythm interpretation: Accelerated junctional rhythm

**Strip 11-96**

Rhythm: Regular atrial rhythm; irregular ventricular rhythm  
 Rate: Atrial: 84; Ventricular: 70  
 P waves: Sinus  
 PR interval: Lengthens from 0.20–0.36 seconds  
 QRS: 0.08–0.10 seconds  
 Rhythm interpretation: Second degree AV block Mobitz I; ST segment depression is present

**Strip 11-97**

Rhythm: Irregular  
 Rate: 100  
 P waves: Fibrillatory waves present  
 PR interval: Not measurable  
 QRS: 0.06–0.08 seconds (basic rhythm); 0.12 seconds (PVC)  
 Rhythm interpretation: Atrial fibrillation with one PVC

**Strip 11-98**

Automatic interval rate: 63  
 Analysis: First two beats are paced beats followed by one patient beat, two paced beats, loss of capture spike, one patient beat, and 1 paced beat  
 Rhythm interpretation: Loss of capture

**Strip 11-99**

Rhythm: Basic rhythm regular; irregular with premature beat  
 Rate: Basic rhythm rate 125  
 P waves: Sinus  
 PR interval: 0.12 seconds  
 QRS: 0.04–0.06 seconds  
 Rhythm interpretation: Sinus tachycardia with one PAC (12th complex)

**Strip 11-100**

Rhythm: Regular  
 Rate: Atrial: 272; Ventricular: 136  
 P waves: Two flutter waves to each QRS  
 PR interval: Not measurable  
 QRS: 0.04 seconds  
 Rhythm interpretation: Atrial flutter with 2:1 AV conduction

**Strip 11-101**

Rhythm: Irregular  
 Rate: 60  
 P waves: Sinus  
 PR interval: 0.14–0.16 seconds  
 QRS: 0.08 seconds  
 Rhythm interpretation: Sinus arrhythmia

**Strip 11-102**

Rhythm: Regular  
Rate: 48  
P waves: Sinus  
PR interval: 0.14–0.16 seconds  
QRS: 0.08 seconds  
Rhythm interpretation: Sinus bradycardia; a U wave is present

**Strip 11-103**

Rhythm: Regular  
Rate: 214  
P waves: None identified  
PR interval: Not measurable  
QRS: 0.16 seconds or greater  
Rhythm interpretation: Ventricular tachycardia

**Strip 11-104**

Rhythm: Irregular  
Rate: 60  
P waves: Fibrillatory waves present  
PR interval: Not measurable  
QRS: 0.06–0.08 seconds  
Rhythm interpretation: Atrial fibrillation

**Strip 11-105**

Rhythm: Basic rhythm regular  
Rate: Basic rhythm rate 72  
P waves: Sinus P waves present  
PR interval: 0.16 to 0.18 seconds  
QRS: 0.06 to 0.08 seconds (basic rhythm); 0.12 seconds (PVC)  
Rhythm interpretation: Normal sinus rhythm with one interpolated PVC; ST segment depression is present

**Strip 11-106**

Rhythm: Basic rhythm regular; irregular with PJC  
Rate: Basic rhythm rate 65  
P waves: Sinus P waves with basic rhythm; inverted P wave with PJC  
PR interval: 0.12 to 0.16 seconds (basic rhythm); 0.10 seconds (PJC)  
QRS: 0.06 to 0.08 seconds  
Rhythm interpretation: Normal sinus rhythm with one PJC; a U wave is present

\* **Strip 11-107**

Rhythm: Basic rhythm regular; irregular with PVC  
Rate: Basic rhythm rate 88  
P waves: Sinus  
PR interval: 0.12–0.14 seconds  
QRS: 0.04–0.06 seconds  
Rhythm interpretation: Normal sinus rhythm with three PVCs

