

Axis

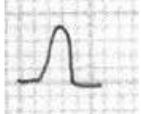
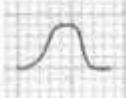
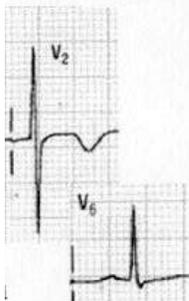
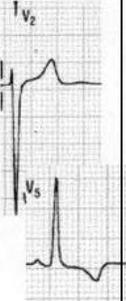
Normal: 30 to +110  
 LAD: -31 to -90  
 RAD: +110 to +180  
 Indeterminate: -180 to -90

Causes

LAD: Inferior MI, VT, WPW, LVH, LBBB, LAFB

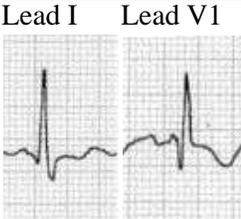
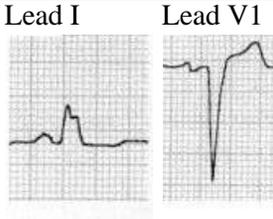
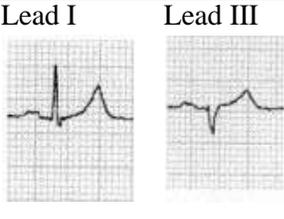
RAD: Dextrocardia, VT, RVH, RBBB, LPFB

Indeterminate: VT

Chamber Enlargement	
<u>RAE</u> Peaked and taller than 2.5 mm in I and II 	<u>LAE</u> Notched and wider than 0.11 in I and II 
<u>Biatrial</u> Taller than 2.5 Wider than 0.11 in I and II 	
<u>RVH</u> <ul style="list-style-type: none"> <li>Tall R wave in I, aVL, V1-2</li> <li>Small QRS in V5-6</li> <li>Strain in II, III, aVF, V1-2</li> </ul> 	<u>LVH</u> <ul style="list-style-type: none"> <li>Deepest S in V1 &amp; V2</li> <li>Tallest R in V5 &amp; V6</li> <li>S+R ≥ 35mm</li> <li>Strain in II, III, aVF and I and V4-6</li> </ul> 

I Lateral	aVR	V1 Septal	V4 Anterior
		Posterior Mirror changes ↓ ST	V4R RVMI ST ↑
II Inferior	aVL High lateral	V2 Septal	V5 Lateral
		Posterior Mirror changes ↓ ST	
III Inferior	aVF Inferior	V3 Anterior	V6 Lateral
RVMI ST ↑ III > II ST ↑ V1 ↓ V2			Apical MI All leads but V1 and aVR

Location of MI	Indicative Changes	Reciprocal Changes
Anterior	V3 to V4	I, aVL, II, III, aVF
Anteroseptal	V1 to V4	Right posterior leads
Anteroseptal with lateral extension	V1 to V6 Can involve I, aVL	II, III, aVF
Inferior	II, III, aVF	I, aVL, V1 to V4
Lateral	I, aVL, V5, V6	II, III, aVF, V1, V2
Inferolateral	II, III, aVF, V5, V6 Can involve I, aVL	V1, V2
Apical	I, II, III, aVF, aVL, V2 to V6	
Posterior	“Mirror changes” V1 and V2. Tall and wide R wave. ST segment depression.	V1 to V4 tall T wave
Right ventricle	V1 ↑ and V2 ↓ V3R to V6R, V4R most sensitive	ST segment higher in III than II

Bundle Branch Blocks				Fascicular Blocks			
RBBB QRS ≥ 0.12 Slurred S in I and V6, triphasic and upright in V1 	LBBB QRS ≥ 0.12 Monophasic in I, V6 and V1. Negative in V1 	LAFB QRS < 0.12 LAD Q I S III 	LPFB QRS < 0.12 RAD Q III S I 