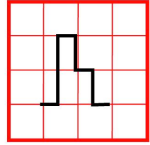
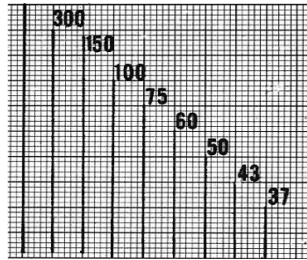


Age	HR	Axis	PR	QRS	Max voltages: R in V1	S in V1	R in V6	S in V6
0-7 days	95-160	30-180	0.08-0.12	0.05-0.07	26	19	12	10
1-3 wks	105-180	30-180	0.08-0.12	0.05-0.07	21	11	16	10
1-6 mos	110-180	10-125	0.08-0.13	0.05-0.07	19	15	22	8
6-12 mo	110-170	10-125	0.10-0.14	0.05-0.07	20	18	23	7
1-3 yr	90-150	10-125	0.10-0.14	0.06-0.07	18	21	23	6
4-5 yr	90-150	0-110	0.11-0.15	0.07-0.08	16	22	25	5
6-8 yr	60-130	-15-110	0.12-0.16	0.07-0.08	13	25	26	4
9-11 yr	60-110	-15-110	0.12-0.17	0.07-0.09	12	25	25	4
12-16 yr	60-110	-15-110	0.12-0.17	0.07-0.10	10	21	23	4
> 16 yr	60-110	-15-110	0.12-0.20	0.08-0.10	9	20	20	4



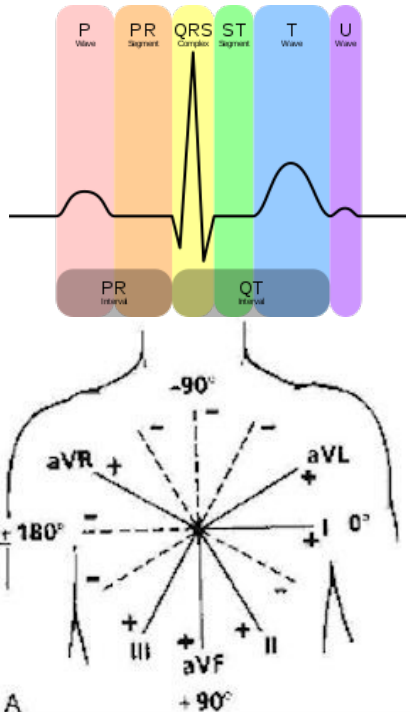
Double voltages V1-V6 if see this = half standard

QTc = QT/√RR
 0-6mo ≤ 0.48-0.49
 Male & pre-pub female ≤ 0.45
 Post-pub female ≤ 0.46

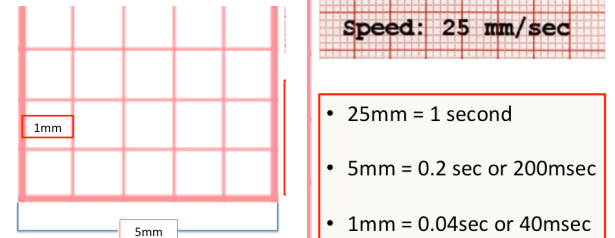
P wave height
 0-6mo ≤ 3mm
 > 6mo ≤ 2.5mm
Duration < 0.08

Q waves normal
 II, III, aVF, V4-V6 < 0.04 seconds duration
 < 5mm in aVF and V4-V6
 < 8mm in lead III for < 3 year old
 < 25% QRS amplitude

Juvenile T waves
 normal inverted V1-V3 4days-adol



RVH pemsources.org
 R in V1 and/or S in V6 > max
 Upright T in V1 4 days-adolesc
 Q in V1, qR or pure R in V1
LVH
 R in V6 and/or S in V1 > max
 LAD for age
 Q>5mm & tall T in V5 or V6



Seattle Criteria: Normal in Pediatrics/Athletes*
 Increased QRS voltage criteria for LVH or RVH*
 Incomplete RBBB (rSR' pattern) in V1 (< 120 msec)
 Early repolarization J point ST segment elevation
 J point ST elevation followed by T wave inversion V1-V4 in black athletes*
 T wave inversion V1-V3 in 4 days to ≤ 16 years old
 Sinus bradycardia > 30 bpm* or sinus arrhythmia
 Ectopic atrial or junctional escape rhythm*
 1st deg AV Block; Mobitz type 1 2nd deg AV block*

Sources: Harriet Lane Handbook, 21st edition, O'Connor M et al Am J Emerg Med 2008;26:506, Drezner JA et al Br J Sports Med 2017; 51:704