

2024 AIMVT Cardiology Fundamental Advanced Skills Reference List

This is **NOT** the list you will submit with your application. Use this only as a reference.

The submission form can be found here: [2024 Cardiology Fundamental Advanced Skills](#)

1. Vertebral heart scale calculation (lateral thoracic radiograph)	2. Record a base-apex lead ECG in a large animal species
3. Calculate mean electrical axis (MEA) on both normal and abnormal electrocardiographs (ECGs) in both canines and felines	4. Calculate P-R interval on both normal and abnormal ECGs
5. Calculate Q-T interval on both normal and abnormal ECGs	6. Calculate QRS complex duration on both normal and abnormal ECGs
7. Calculate P wave amplitude on both normal and abnormal ECGs	8. Calculate R wave amplitude on both normal and abnormal ECGs
9. Calculate T wave amplitude on both normal and abnormal ECGs	10. Record right parasternal four chamber long axis view via echocardiography (echo), and identify all chambers and/or major vessels visible
11. Record right parasternal five chamber long axis view (or left ventricular outflow view) via echo, and identify all chambers and/or major vessels visible	12. Record right parasternal short axis view at the chordae tendineae level via echo, and identify all chambers and/or major vessels visible
13. Record right parasternal short axis mitral valve view via echo, and identify all chambers and/or major vessels visible	14. Record right parasternal short axis view of the aorta / left atrium via echo, and identify all chambers and/or major vessels visible
15. Record right parasternal short axis view of the pulmonary artery via echo, and identify all chambers and/or major vessels visible	16. Perform M-Mode recording via echo of the left ventricle from either a long or short axis view, and identify all chambers and/or major vessels visible
17. Perform M-Mode recording via echo of the mitral valve from either a long or short axis view, and identify all chambers and/or major vessels visible	18. Perform M-Mode recording via echo of the aorta and left atrium from either a long or short axis view, and identify all chambers and/or major vessels visible
19. Measure left ventricle fractional shortening (shortening fraction) using echo M-Mode	20. Measure the aorta:left atrium ratio using echo M-Mode
21. Measure the mitral valve E-point to septal separation (EPSS) using echo M-Mode	22. Measure spectral Doppler velocity profiles via echo
23. Identify normal cardiac structures via angiography	24. Identify a patent ductus arteriosus via angiography
25. Identify pulmonic stenosis via angiography	26. Interrogate a pacemaker to determine battery life
27. Set up and calibrate physiologic transducers to measure direct intracardiac and intravascular pressures	28. Set up for and assist with or perform micro-bubble air contrast echocardiogram
29. Arterial blood gas sampling and/or arterial catheter placement	30. Central venous catheter placement
31. Central venous pressure monitoring	32. Set up for and assist with or perform abdominocentesis
33. Placement of nasal cannulas and administration of nasal oxygen	

Mastery of these auscultation skills are **MANDATORY**:

34. Characterize cardiac murmurs by grade (1-6), location (right or left hemithorax; apex; or base), and timing (systolic, diastolic, or continuous)	35. Identify a gallop sound, split sound, or mid-systolic click
36. Identify normal respiratory rhythm variations	37. Identify abnormal rhythms
38. Identify ectopic beats	39. Identify paroxysmal tachycardia