

## 2025 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: [2025 Cardiology Fundamental Advanced Skills](#)

1. Vertebral heart scale calculation (lateral thoracic radiograph)	2. Vertebral left atrial size (VLAS) measurement (lateral thoracic radiograph)
3. Record a base-apex lead ECG in a large animal species	4. Calculate mean electrical axis (MEA) on both normal and abnormal electrocardiographs (ECGs) in both canines and felines
5. Calculate P-R interval on both normal and abnormal ECGs	6. Calculate Q-T interval on both normal and abnormal ECGs
7. Calculate QRS complex duration on both normal and abnormal ECGs	8. Calculate P wave amplitude on both normal and abnormal ECGs
9. Calculate R wave amplitude on both normal and abnormal ECGs	10. Calculate T wave amplitude on both normal and abnormal ECGs
11. Record right parasternal four chamber long axis view via echocardiography (echo), and identify all chambers and/or major vessels visible	12. Record right parasternal five chamber long axis view (or left ventricular outflow view) via echo, and identify all chambers and/or major vessels visible
13. Record right parasternal short axis view at the chordae tendineae level via echo, and identify all chambers and/or major vessels visible	14. Record right parasternal short axis mitral valve view via echo, and identify all chambers and/or major vessels visible
15. Record right parasternal short axis view of the aorta / left atrium via echo, and identify all chambers and/or major vessels visible	16. Record right parasternal short axis view of the pulmonary artery via echo, and identify all chambers and/or major vessels visible
17. 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	18. 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
19. 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	20. Measure left ventricle fractional shortening (shortening fraction) using echo M-Mode
21. Measure the aorta:left atrium ratio using echo M-Mode	22. Measure the mitral valve E-point to septal separation (EPSS) using echo M-Mode
23. Measure spectral Doppler velocity profiles via echo	24. Identify normal cardiac structures via angiography
25. Identify a patent ductus arteriosus via angiography	26. Identify pulmonic stenosis via angiography
27. Interrogate a pacemaker to determine battery life	28. Set up and calibrate physiologic transducers to measure direct intracardiac and intravascular pressures
29. Set up for and assist with or perform micro-bubble air contrast echocardiogram	30. Arterial blood gas sampling and/or arterial catheter placement
31. Central venous catheter placement	32. Central venous pressure monitoring
33. Set up for and assist with or perform abdominocentesis	34. Placement of nasal cannulas and administration of nasal oxygen

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

35. Characterize cardiac murmurs by grade (1-6), location (right or left hemithorax; apex; or base), and timing (systolic, diastolic, or continuous)	36. Identify a gallop sound, split sound, or mid-systolic click
37. Identify normal respiratory rhythm variations	38. Identify abnormal rhythms
39. Identify ectopic beats	40. Identify paroxysmal tachycardia