1. Horizontal lines visualized due to the pleural line artifact (equidistant from the chest wall to the pleural line and then after the pleural line) are called:
   A. H lines
   B. B lines
   C. A lines
   D. Lung lines

2. When evaluating pleural effusions, what structure is most important to identify?
   A. Heart
   B. Pleural line
   C. Lung line
   D. Diaphragm

3. What findings on a consolidated lung indicate pneumonia may be the cause of the consolidation and not atelectasis?
   A. Plankton sign
   B. Fibrin air stranding
   C. Dynamic air bronchograms
   D. Dynamic fluid flow

4. T or F: Absence of lung sliding means a chest tube must be placed for suspected pneumothorax
   A. True
   B. False

5. T or F: An A/B profile suggests pulmonary edema on the side of the B findings
   A. True
   B. False

6. Which of the following is not a typical cardiac view performed in transthoracic
   A. Parasternal long
   B. Apical
   C. Subcostal
   D. Paraspinal

7. IVC variation is best used to predict:
   A. Fluid responsiveness
   B. Pulmonary artery systolic pressure
   C. LV ejection fraction
   D. RV systolic pressure

8. What is the best view of evaluation of LV systolic function?
   A. Parasternal short - Mitral valve level
   B. Parasternal short - Papillary muscle level
   C. Parasternal short - Apical level
   D. Parasternal long

9. From the parasternal long axis view, the parasternal short axis view is obtained by:
   A. Clockwise rotation of 45 degrees
   B. Clockwise rotation of 90 degrees
   C. Counter-clockwise rotation of 90 degrees
   D. 180 degrees clockwise

10. What structure posterior to the heart pericardium is important to identify on the parasternal long axis view?
    A. Right pleural effusion
    B. Left pleural line
    C. Left lung line
    D. Descending aorta
11. In the abdomen, what is the anatomical relationship between the aorta and the IVC?

A. Aorta is to the anatomical left of the IVC
B. Aorta is to the anatomical right of the IVC
C. The aorta is anterior to the IVC

12. Which of the following can not be used to distinguish between carotid artery and internal jugular vein?

A. Jugular vein is typically more ovoid in shape
B. The jugular vein is typically smaller than the carotid
C. The vein is compressible whereas artery is not

13. Ultrasound use in post catheter placement is:

A. Can be used to evaluate pleural line for pneumothorax
B. Line best seen in longitudinal view
C. Not recommended
D. Both A and B

14. ‘Dynamic’ approach for line insertion using ultrasound means:

A. The procedure is done blindly but after having localized the vein prior to procedure
B. The procedure is done with ultrasound in the Doppler mode to see the dynamic blood flow
C. The procedure is done with ultrasound after the blind approach fails
D. The procedure is performed under direct guidance, with real time view of the needle

15. In a patient with a high clinical suspicion for DVT, a negative scan on your exam should:

A. Strongly suggest that be confirmed with a full duplex study performed by an expert
B. Greatly reduces likelihood and full duplex does not need to be ordered even if the suspicion is high
C. Should be repeated twice a day for 72 hours
D. Should be repeated daily for 48 hours

16. Extended FAST includes what imaging to the focused assessment with sonography in trauma (FAST)

A. Pleural/Lung/Thoracic
B. Large vessel injury (Aorta)
C. Deep vein thrombosis evaluation
D. Extended cardiac evaluation

17. Which of the following is not evaluated during a typical FAST exam?

A. Pericardial space
B. Hepatorenal space
C. Splenorenal space
D. Aorta

18. In a typical emergency and critical care setting, which of the following is not evaluated when doing a renal scan?

A. Presence of hydronephrosis
B. Doppler of renal stones
C. Fluid in the hepatorenal space
D. Size of kidney

19. T or F: The bladder must also be studied when attempting to determine cause of renal failure and/or oligoanuria

A. True
B. False

20. Based on Doppler principle, when a sound source moves away from an observer, the frequency will:

A. Decrease
B. Increase
C. Stay the same
D. Can not be determined