ANSWERS: CHAPTER 1

MATCHING

1. e  4. i  7. g  10. b
2. k  5. c  8. a  11. f
3. d  6. h  9. j

IMAGE LABELING

1A. Supine
1B. Lateral
1C. Prone
1D. Left anterior oblique
2A. Cephalic/superior
2B. Anterior
2C. Caudal/inferior
2D. Posterior
3A. Cephalic/superior
3B. Left
3C. Caudal/inferior
3D. Right
4A. Right
4B. Anterior
4C. Left
4D. Posterior
5A. Anterior
5B. Caudal/inferior
5C. Posterior
5D. Cephalic/superior
5E. Right
5F. Caudal/inferior
5G. Left
5H. Cephalic/superior
6A. Cephalic/superior
6B. Posterior/rectum
6C. Caudal/inferior
6D. Anterior
6E. Right
6F. Posterior/rectum
6G. Left
6H. Anterior
7A. Anterior
7B. Caudal/inferior
7C. Posterior
7D. Cephalic/superior
7E. Right
7F. Caudal/inferior
7G. Left
7H. Cephalic/superior

FILL-IN-THE-BLANK

1. Contralateral
2. Superior/cranial
3. Sagittal
4. Mid-sagittal
5. Trendelenburg
6. Transverse
7. Coronal
8. Inferior/caudal
9. Gain
10. Anechoic
11a. Homogeneous
11b. Heterogeneous
12. Shadow
13. Reverberation
14. Complex
15. Technical impression

SHORT ANSWER

1. In order to be classified as a simple cyst, the structure must meet the following criteria: 1) anechoic center; 2) well-defined mass with a well-defined posterior wall; 3) increased through transmission; 4) possible reverberation artifact behind the near wall; and 5) possible edge shadowing artifact.

2. The preliminary report or technical impression should describe the findings from the sonographic examination using descriptive terminology such as the scan plan, tissue textures, measurements, etc. Although the sonographer should describe what he or she sees as completely and accurately as possible, he or she should refrain from recording a diagnosis.

3. When describing a solid mass, the location of the mass should be described and the mass should also be described in reference to the surrounding tissues. Terms such as hyperechoic, hypoechoic, or isoechoic to the surrounding tissues can be used to describe a solid mass. The echo intensity can also be described with the terms homogeneous or heterogeneous. The attenuation properties of the mass can be described if there is acoustic shadowing or increased through transmission posterior to the mass.

IMAGE EVALUATION/PATHOLOGY

1. Shadowing

2. Acoustic enhancement or increased through transmission; anechoic

3. The kidney cortex is isoechoic to the liver parenchyma; the mass is hypoechoic to the kidney cortex; homogeneous
1. Prior to starting any examination, the sonographer should obtain as much pertinent information as possible. Having a complete clinical picture can enable the sonographer to tailor the exam to the patient’s needs. The sonographer should know the indication for the examination and relevant information such as laboratory values, surgical history, results of prior examinations, and related imaging examinations. This information could be obtained from the physician’s order, from the patient’s chart, or from the patient directly. The examination procedures should be explained to the patient and any questions or concerns should be addressed.

2. Sensitivity = 85%, Specificity = 97%, Accuracy = 90%