

MULTIPLE CHOICE

1. A vertical plane that passes through the body, dividing it into anterior and posterior portions, is the _____ plane.
 - a. Sagittal
 - b. Coronal
 - c. Axial
 - d. Oblique

ANS: B

OBJ: Define the four anatomic planes.

2. The directional term *contralateral* refers to which of the following?
 - a. On the same side
 - b. On the opposite side
 - c. Toward the midsagittal plane
 - d. Away from the midsagittal plane

ANS: B

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

3. The directional term *rostral* refers to which of the following?
 - a. The front or palm of the hand
 - b. The sole of the foot
 - c. Toward the feet
 - d. Toward the nose

ANS: D

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

4. The term *popliteal* refers to the area of the:
 - a. Upper portion of the leg
 - b. Back of the knee
 - c. Lower portion of the leg
 - d. Sole of the foot

ANS: B

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

5. The term *flank* refers to the area of the:
 - a. Upper chest or breast
 - b. Lower back between the ribs and hips
 - c. Side of the trunk adjoining the lumbar region
 - d. Abdomen

ANS: C

OBJ: Describe the relative position of specific structures within the body using directional and

regional terminology.

6. The aortic arch is located:
- 2.5 cm below the jugular notch
 - At T4-T5, sternal angle
 - 4 cm above the transpyloric plane
 - 2 cm above the transpyloric plane

ANS: A OBJ: Identify the location of commonly used internal landmarks.

7. The carotid bifurcation is located:
- 4 cm above the pyloric plane
 - 4 cm above bifurcation of the abdominal aorta
 - At the upper border of the thyroid cartilage
 - At the upper margin of the sacroiliac joint

ANS: C OBJ: Identify the location of commonly used internal landmarks.

8. The inferior mesenteric artery is located:
- 2 cm above the transpyloric plane
 - 4 cm above the transpyloric plane
 - 2.5 cm below the jugular notch
 - 4 cm above the bifurcation of the abdominal aorta

ANS: D OBJ: Identify the location of commonly used internal landmarks.

9. Most of the small intestine is located in which of the abdominal quadrants?
- Right upper quadrant (RUQ)
 - Right lower quadrant (RLQ)
 - Left upper quadrant (LUQ)
 - Left lower quadrant (LLQ)

ANS: D OBJ: List the structures located within the four abdominal quadrants.

10. Which of the body cavities is the largest?
- Dorsal
 - Ventral
 - Abdominal
 - Pelvic

ANS: B OBJ: Describe the dorsal and ventral cavities of the body.

11. The plane that passes diagonally between the axes of two other planes is the _____ plane.
- Sagittal
 - Coronal
 - Axial
 - Oblique

ANS: D OBJ: Define the four anatomic planes.

12. The directional term *caudal* refers to which of the following?
- On the same side
 - On the opposite side

- c. Toward the feet
- d. Toward the head

ANS: C

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

13. The directional term *proximal* refers to which of the following?
- a. On the same side
 - b. On the opposite side
 - c. Away from a reference point
 - d. Toward a reference point

ANS: D

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

14. The term *axillary* refers to the area of the:
- a. Armpit
 - b. Forearm
 - c. Front of elbow
 - d. Upper arm

ANS: A

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

15. The term *cubital* refers to the area of the:
- a. Lower posterior portion of the leg
 - b. Posterior surface of elbow area of the arm
 - c. Lower back between the ribs and hips
 - d. Upper portion of the leg

ANS: B

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

16. The term *antebrachial* refers to the area of the:
- a. Armpit
 - b. Ribs
 - c. Forearm
 - d. Upper arm

ANS: C

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

17. The term *inguinal* refers to the area of the:
- a. Spine
 - b. Naval
 - c. Sternum
 - d. Groin

ANS: D

OBJ: Describe the relative position of specific structures within the body using directional and regional terminology.

18. The carina is located at:
- L4 to L5.
 - T4 to T5, sternal angle.
 - L1 to L2.
 - T1 to T2, sternal angle.

ANS: B

OBJ: Identify the location of commonly used internal landmarks.

19. The dorsal cavity can be further subdivided into which of the following cavities?
- Cranial and spinal
 - Thoracic and abdominopelvic
 - Two lateral pleural
 - Abdominal and pelvic

ANS: A

OBJ: Describe the dorsal and ventral cavities of the body.

20. The stomach and tail of the pancreas are located in which of the following abdominal quadrants?
- Right upper
 - Left upper
 - Right lower
 - Left lower

ANS: B

OBJ: List the structures found within the four abdominal quadrants.

21. Which of the following is a parameter that allows for the adjustment of the gray scale?
- CT number
 - Hounsfield unit
 - Window width
 - Window level

ANS: C

OBJ: Describe the gray scale used in CT and MR imaging.

22. Images reconstructed from data obtained along any projection through the cube that result in a sagittal, coronal, transverse, or oblique image are termed:
- Multiplanar reformation
 - Shaded surface display
 - Maximum intensity projection
 - Volume rendering

ANS: A

OBJ: Describe MPR, CPR, SSD, MIP, and VR.

23. Which of the following techniques can be described as a ray from the camera's view point that is directed to stop at a particular user-defined threshold value?
- Multiplanar reformation
 - Shaded surface display
 - Maximum intensity projection
 - Volume rendering

ANS: B

OBJ: Describe MPR, CPR, SSD, MIP, and VR.

24. Water is used as a reference tissue and is given the CT number of:
- a. -1000
 - b. -500
 - c. 0
 - d. +1000

ANS: C

OBJ: Describe the gray scale used in CT and MR imaging.

25. The transpyloric plane is found midway between the:
- a. Xiphosternal joint and the pubic symphysis
 - b. Xiphosternal joint and umbilicus
 - c. Tubercles of the iliac crests
 - d. Tubercles of the iliac crests and L3

ANS: B

OBJ: List the nine regions of the abdomen.

26. Which of the following is a midline point at the anterior nasal spine where the upper lip and nasal septum meet?
- a. Nasion
 - b. Gonion
 - c. Mastoid tip
 - d. Acanthion

ANS: D

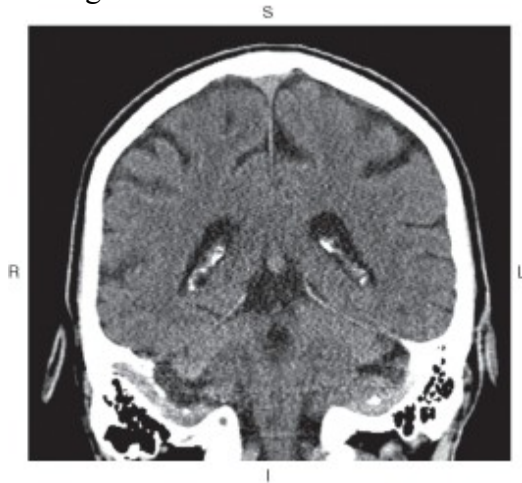
OBJ: Identify commonly used external landmarks.

27. The crest of the ilium is located at what vertebral level?
- a. L2
 - b. L3
 - c. L4
 - d. L5

ANS: D

OBJ: Identify commonly used external landmarks.

28. The figure below illustrates which of the following imaging planes?



- a. Axial
- b. Coronal
- c. Sagittal

d. Oblique

ANS: B

OBJ: Define the four anatomic planes.

29. The figure below illustrates which of the following imaging planes?

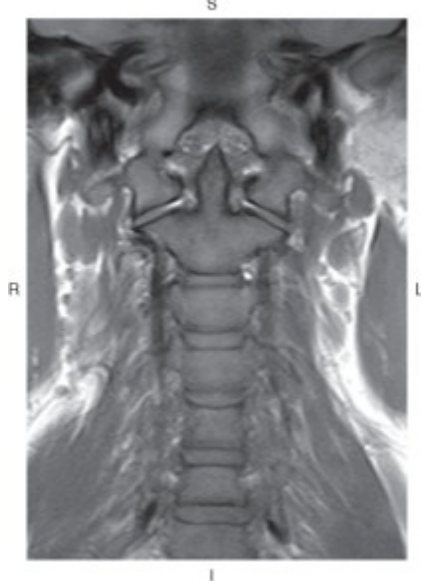


- a. Axial
- b. Coronal
- c. Sagittal
- d. Oblique

ANS: A

OBJ: Define the four anatomic planes.

30. The figure below illustrates which of the following imaging planes?

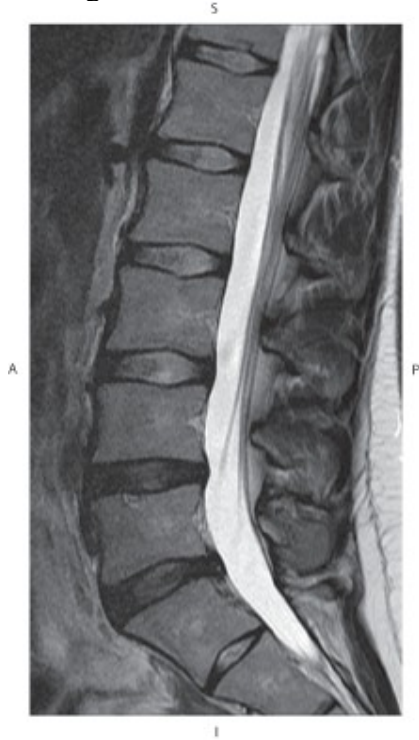


- a. Axial
- b. Coronal
- c. Sagittal
- d. Oblique

ANS: B

OBJ: Define the four anatomic planes.

31. The figure below illustrates which of the following imaging planes?

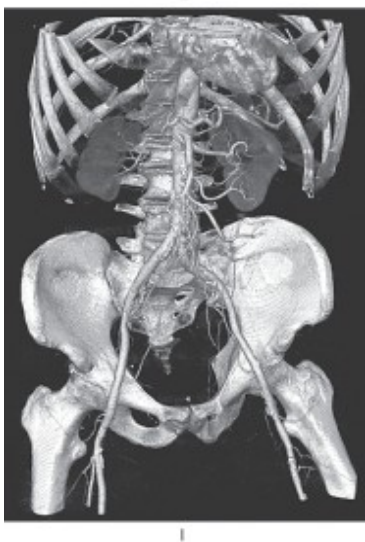


- a. Axial
- b. Coronal
- c. Sagittal
- d. Oblique

ANS: C

OBJ: Define the four anatomic planes.

32. The figure below is an example of which of the following?



- a. Multiplanar reformation
- b. Shaded surface display
- c. Maximum intensity projection

d. Volume rendering

ANS: B

OBJ: Describe MPR, CPR, SSD, MIP, and VR.

33. The figure below is an example of which of the following?



- a. Multiplanar reformation
- b. Shaded surface display
- c. Maximum intensity projection
- d. Volume rendering

ANS: C

OBJ: Describe MPR, CPR, SSD, MIP, and VR.

34. All of the following image algorithms use the principle of ray-tracing, *except*:

- a. Shaded surface display (SSD)
- b. Maximum intensity projection (MIP)
- c. 2D imaging
- d. Volume rendering (VR)

ANS: C

OBJ: Differentiate between 2D and 3D images.