

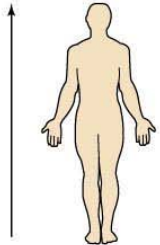
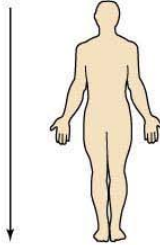
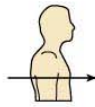
The Language of Anatomy

- **Special terminology is used to prevent misunderstanding**
- **Exact terms are used for**
 - **Position**
 - **Direction**
 - **Regions**
 - **Structures**

Directional Terms

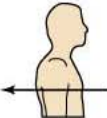
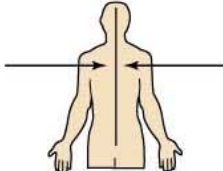
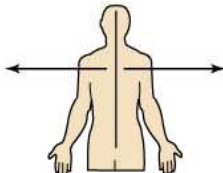
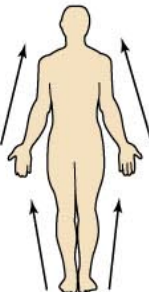
TABLE 1.1

Orientation and Directional Terms

Term	Definition	Illustration	Example
Superior (cranial or cephalad)	Toward the head end or upper part of a structure or the body; above		The forehead is superior to the nose.
Inferior (caudal)*	Away from the head end or toward the lower part of a structure or the body; below		The navel is inferior to the breastbone.
Ventral (anterior)†	Toward or at the front of the body; in front of		The breastbone is anterior to the spine.

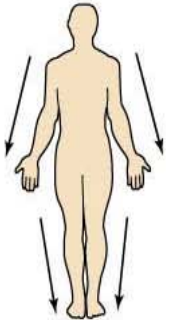
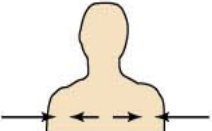
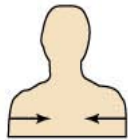
*The term *caudal*, literally “toward the tail,” is synonymous with *inferior* only to the inferior end of the spine.

†*Ventral* and *anterior* are synonymous in humans; this is not the case in four-legged animals. *Ventral* refers to the “belly” of an animal and thus is the inferior surface of four-legged animals. Likewise, although the dorsal and posterior surfaces are the same in humans, the term *dorsal* refers to an animal’s back. Thus, the dorsal surface of four-legged animals is their superior surface.

Term	Definition	Illustration	Example
Dorsal (posterior) [†]	Toward or at the backside of the body; behind		The heart is posterior to the breastbone.
Medial	Toward or at the midline of the body; on the inner side of		The heart is medial to the arm.
Lateral	Away from the midline of the body; on the outer side of		The arms are lateral to the chest.
Proximal	Close to the origin of the body part or the point of attachment of a limb to the body trunk		The elbow is proximal to the wrist (meaning that the elbow is closer to the shoulder or attachment point of the arm than the wrist is).

*The term *caudal*, literally “toward the tail,” is synonymous with *inferior* only to the inferior end of the spine.

[†]*Ventral* and *anterior* are synonymous in humans; this is not the case in four-legged animals. *Ventral* refers to the “belly” of an animal and thus is the inferior surface of four-legged animals. Likewise, although the dorsal and posterior surfaces are the same in humans, the term *dorsal* refers to an animal’s back. Thus, the dorsal surface of four-legged animals is their superior surface.

Term	Definition	Illustration	Example
Distal	Farther from the origin of a body part or the point of attachment of a limb to the body trunk		The knee is distal to the thigh.
Superficial (external)	Toward or at the body surface		The skin is superficial to the skeleton.
Deep (internal)	Away from the body surface; more internal		The lungs are deep to the rib cage.

*The term *caudal*, literally “toward the tail,” is synonymous with *inferior* only to the inferior end of the spine.

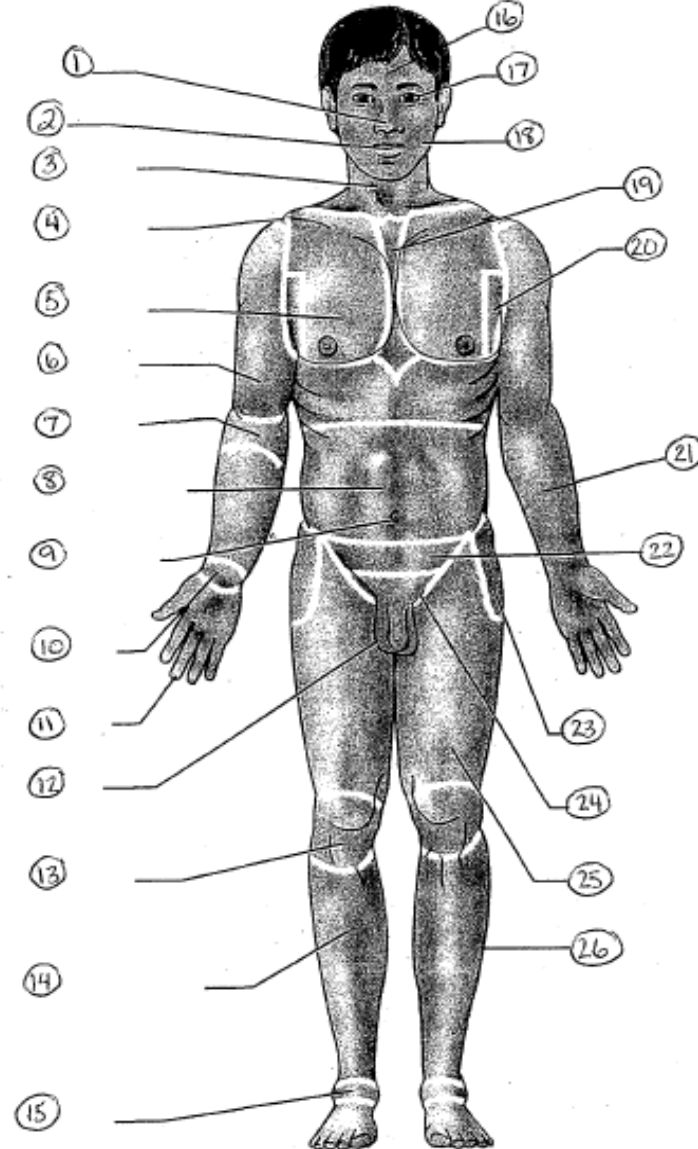
†*Ventral* and *anterior* are synonymous in humans; this is not the case in four-legged animals. *Ventral* refers to the “belly” of an animal and thus is the inferior surface of four-legged animals. Likewise, although the dorsal and posterior surfaces are the same in humans, the term *dorsal* refers to an animal’s back. Thus, the dorsal surface of four-legged animals is their superior surface.

Regional Terms: Anterior View

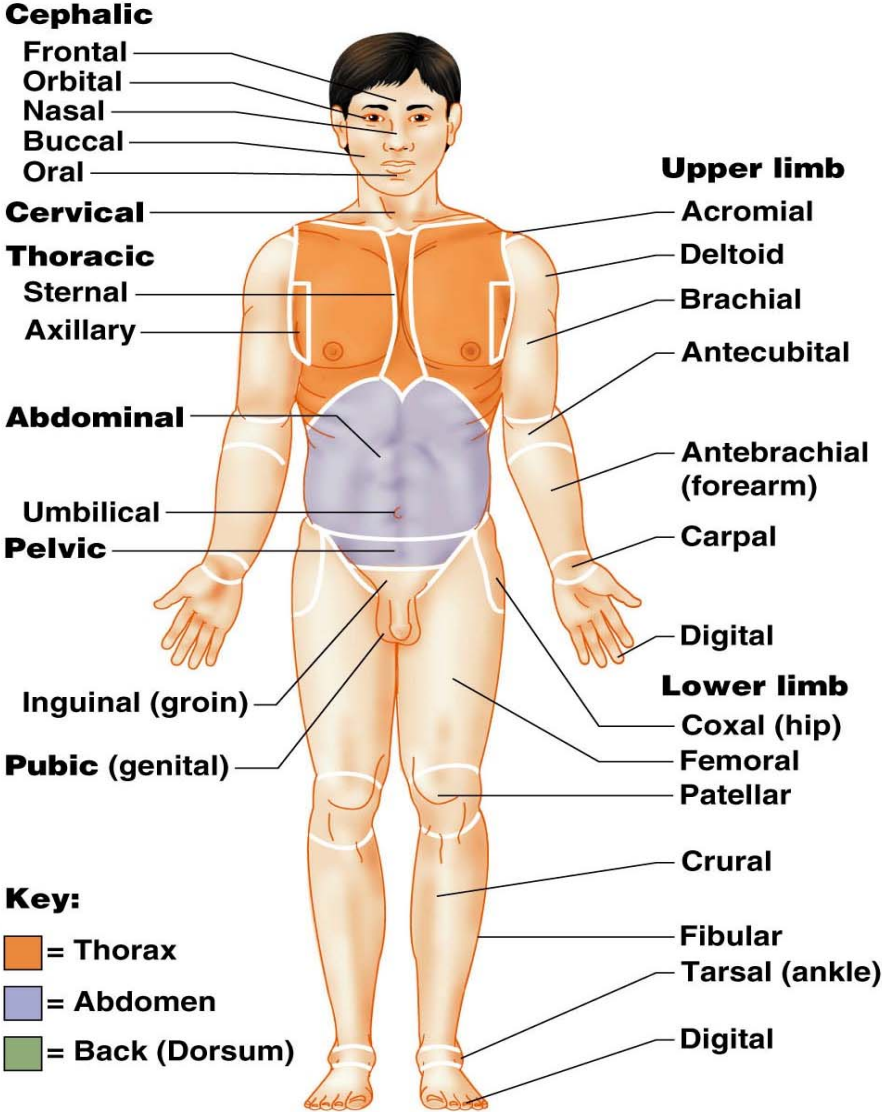
Answers:

- | | |
|----------------|------------------|
| 1. Nasal | 16. Frontal |
| 2. Oral | 17. Orbital |
| 3. Cervical | 18. Buccal |
| 4. Acromial | 19. Sternal |
| 5. Thoracic | 20. Axillary |
| 6. Brachial | 21. Antebrachial |
| 7. Antecubital | 22. Pelvic |
| 8. Abdominal | 23. Coxal |
| 9. Umbilical | 24. Inguinal |
| 10. Carpal | 25. Femoral |
| 11. Digital | 26. Fibular |
| 12. Pubic | |
| 13. Patellar | |
| 14. Crural | |
| 15. Tarsal | |

Directions: Use the words listed below to label the diagram.



Regional Terms: Anterior View



(a) Anterior/Ventral

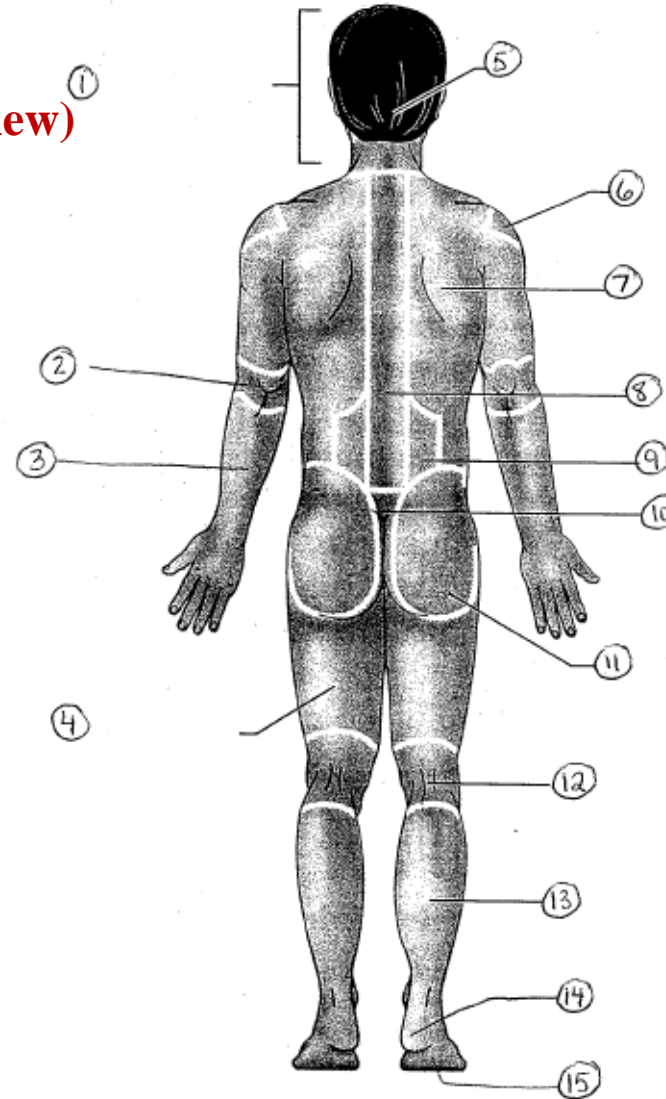
Figure 1.5a

Regional Terms: Posterior View

Directions: Use the words listed below to label the diagram.

Answers: (*also on anterior view)

1. Cephalic
2. Olecranal
3. Antebrachial*
4. Femoral*
5. Occipital
6. Deltoid
7. Scapular
8. Vertebral
9. Lumbar
10. Sacral
11. Gluteal
12. Popliteal
13. Sural
14. Calcaneal
15. Plantar



Regional Terms: Posterior View

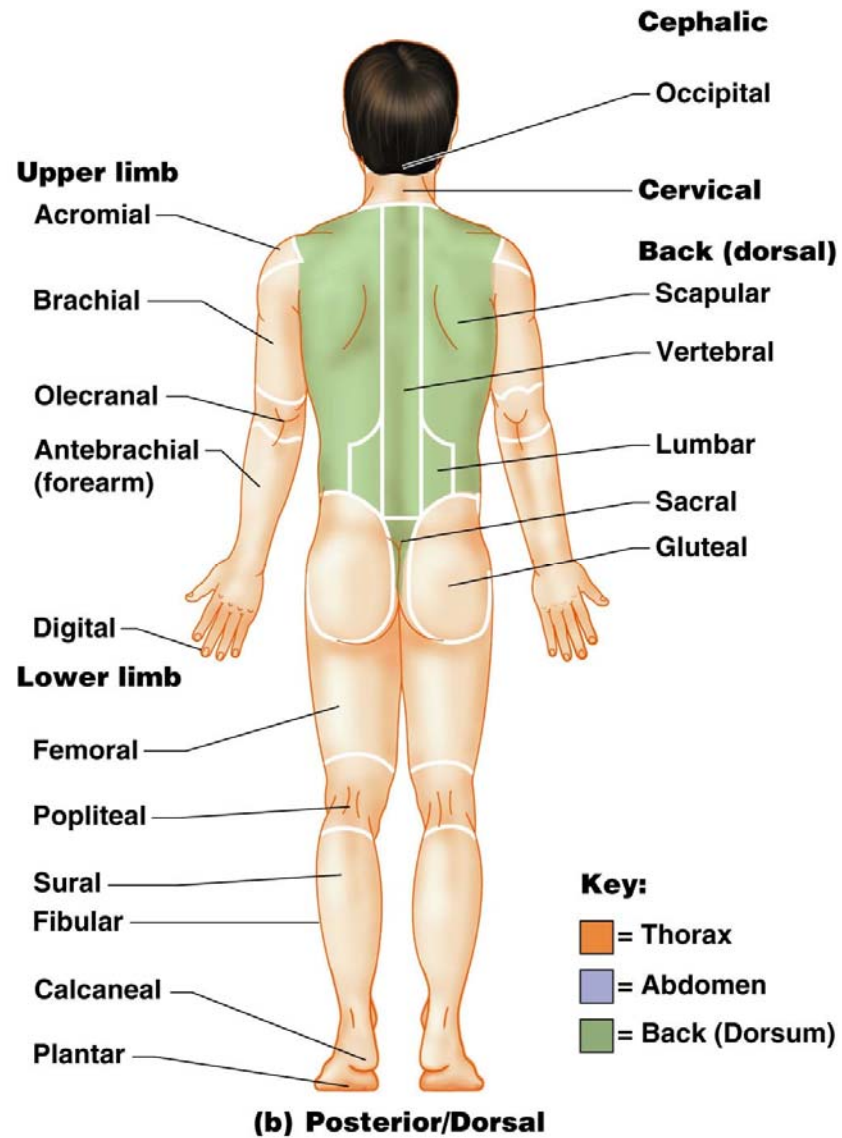
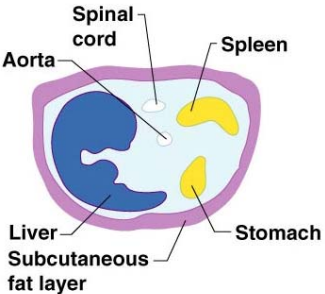
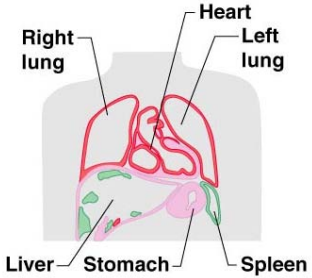
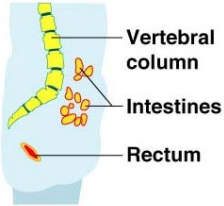
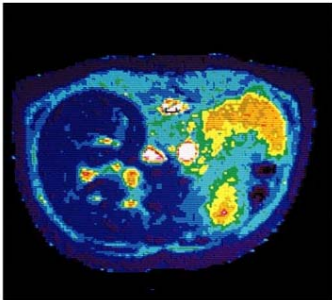
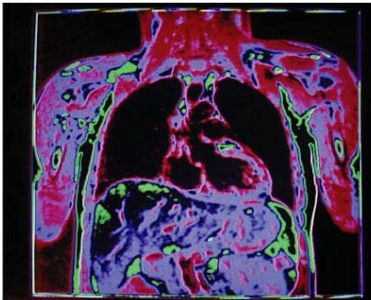
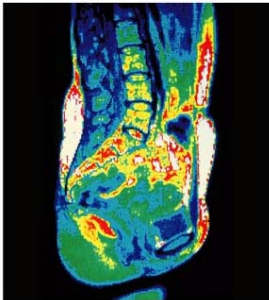


Figure 1.5b

Body Planes and Sections

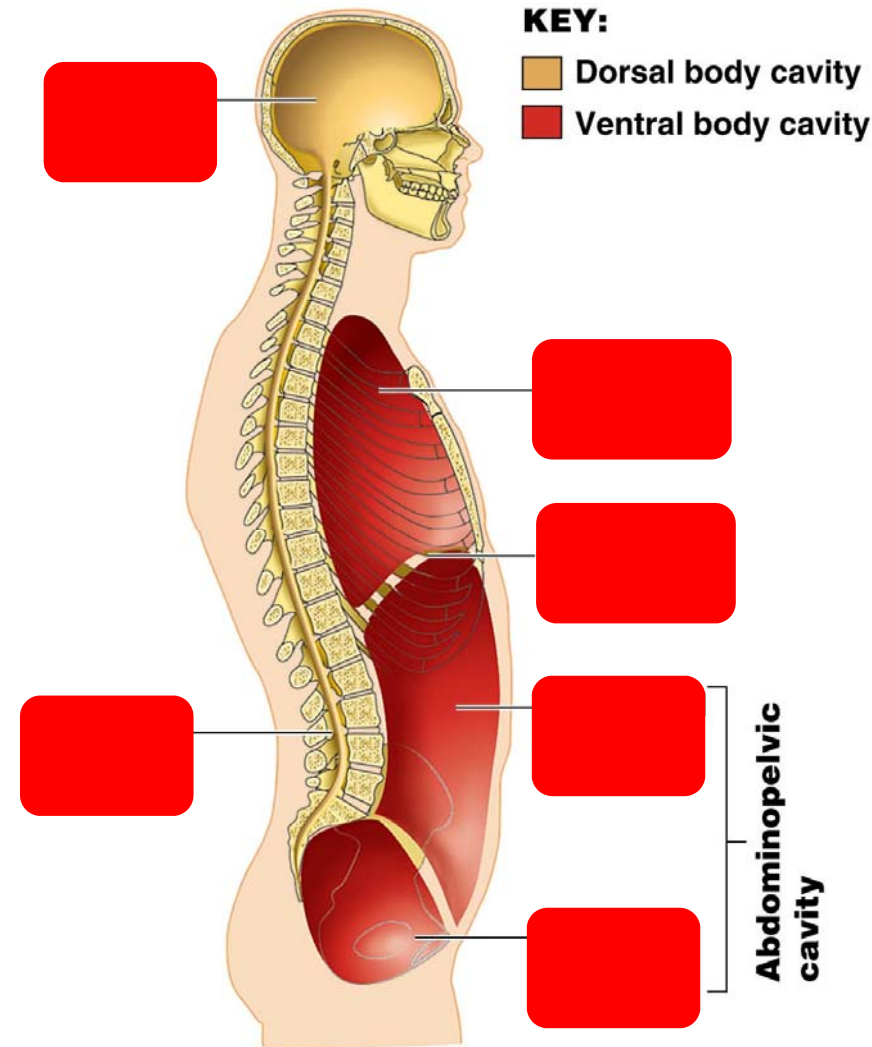
- A sagittal or parasagittal section divides the body (or organ) into **left and right parts**
- A median, or midsagittal, section divides the body (or organ) into ***equal* left and right parts**
- A frontal, or coronal section divides the body (or organ) into **anterior (front) and posterior (back) parts**
- A transverse, or cross, section divides the body (or organ) into **superior (upper) and inferior (lower) parts**
- An oblique section divides the body (or organ) **diagonally**

Body Planes and Sections (cont.)

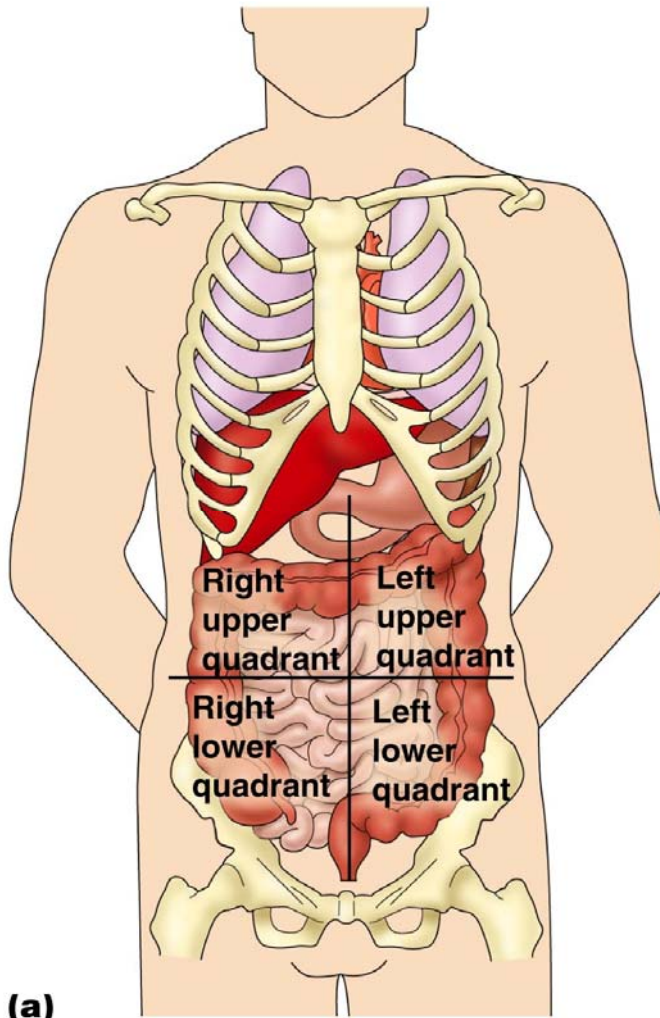


Body Cavities

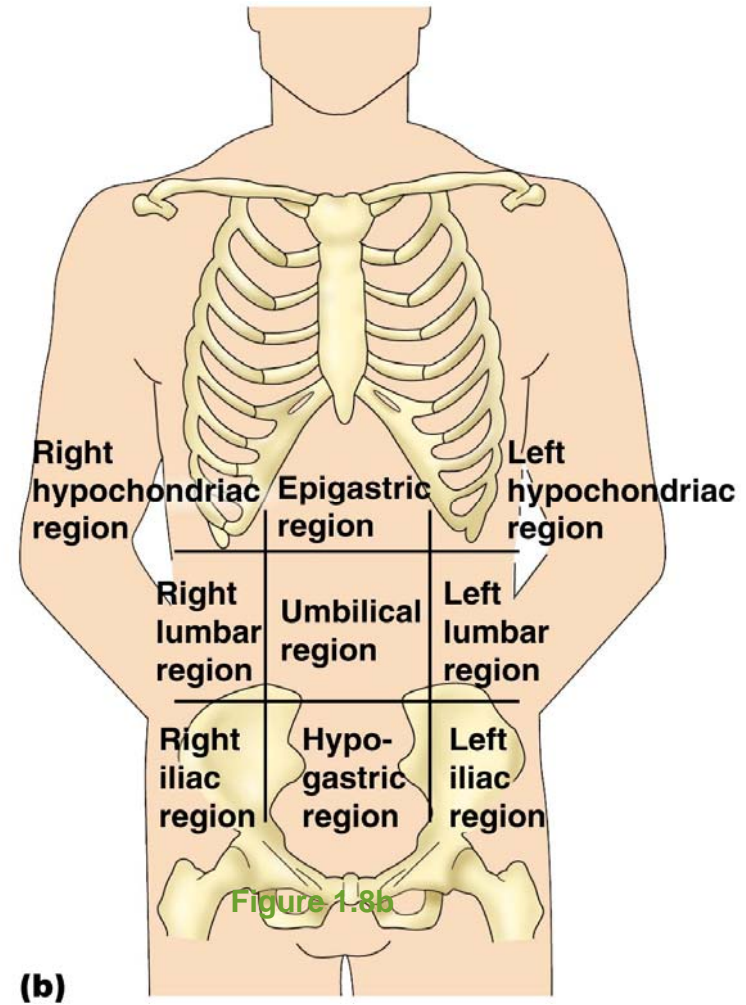
- **Dorsal body cavity**
 - **Cranial cavity- brain**
 - **Spinal cavity- spinal cord**
- **Ventral body cavity**
 - **Thoracic cavity- heart & lungs**
 - **Abdominal cavity- most digestive organs**
 - **Pelvic cavity- most urinary & reproductive system organs**



Abdominopelvic Quadrants



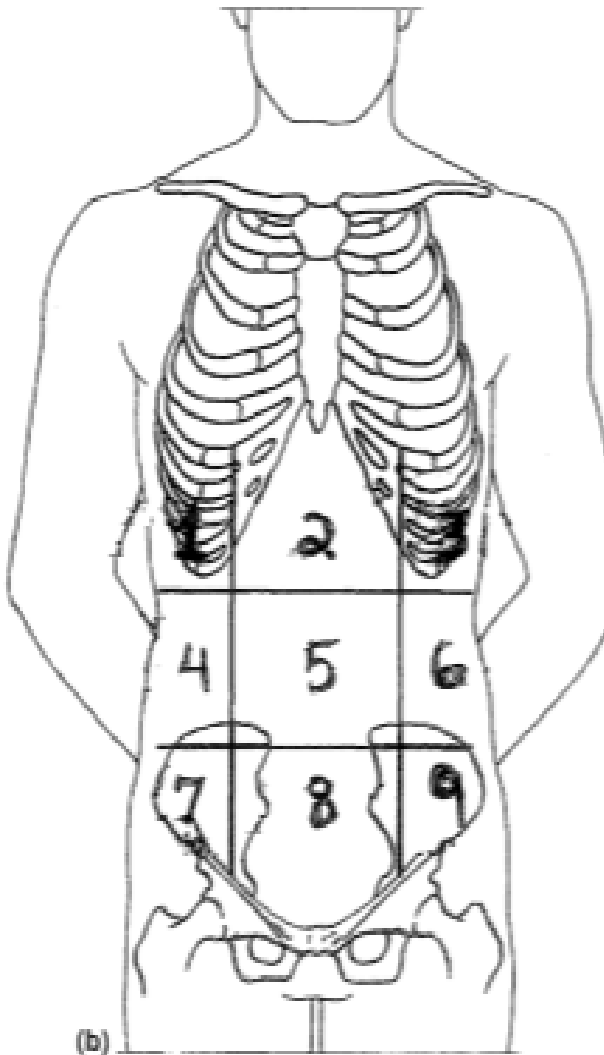
Abdominopelvic Regions

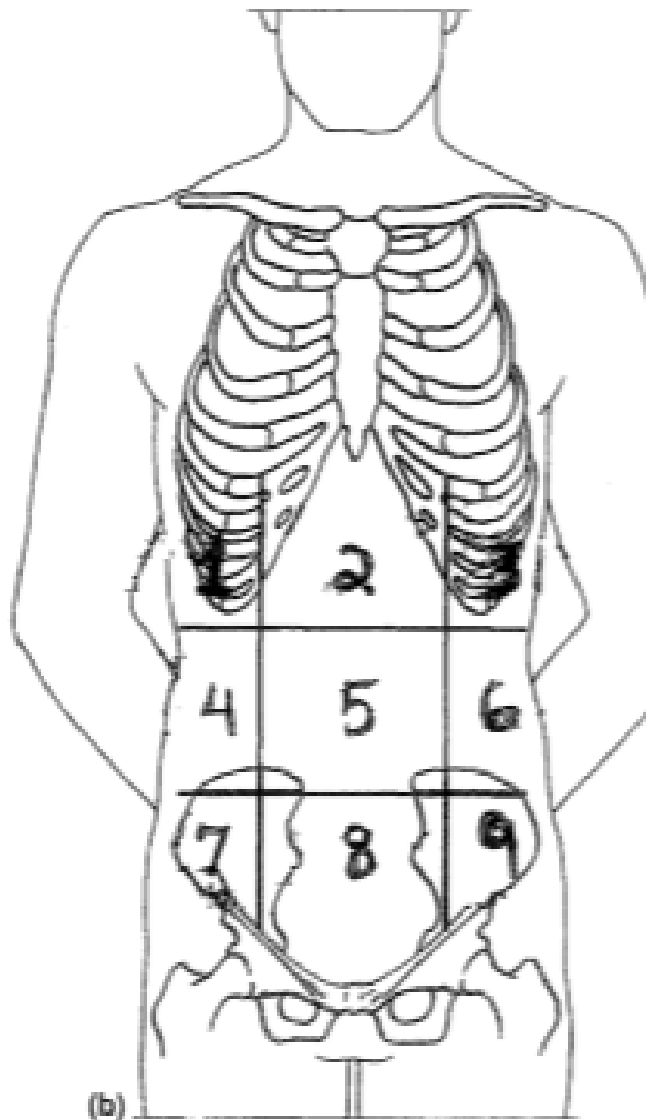


Applying Regional & Directional Terms

Identify each abdominopelvic cavity division by number based on the following descriptions

- The **umbilical region** is the centermost region, deep to and surrounding the navel #5
- The **epigastric region** is superior to the umbilical region #2
- The **hypogastric region** is inferior to the umbilical region #8





Identify each abdominopelvic cavity division by number based on the following descriptions:

- The **right and left iliac or inguinal regions** are lateral to the hypogastric region and superficial to the inferior parts of the hip bones
7 & 9

- The **right and left lumbar regions** are lateral to the umbilical region and overlies the superior parts of the hip bones 4 & 6

- The **right and left hypochondriac regions** are lateral to the epigastric region and overlies the lower ribs 1 & 3