

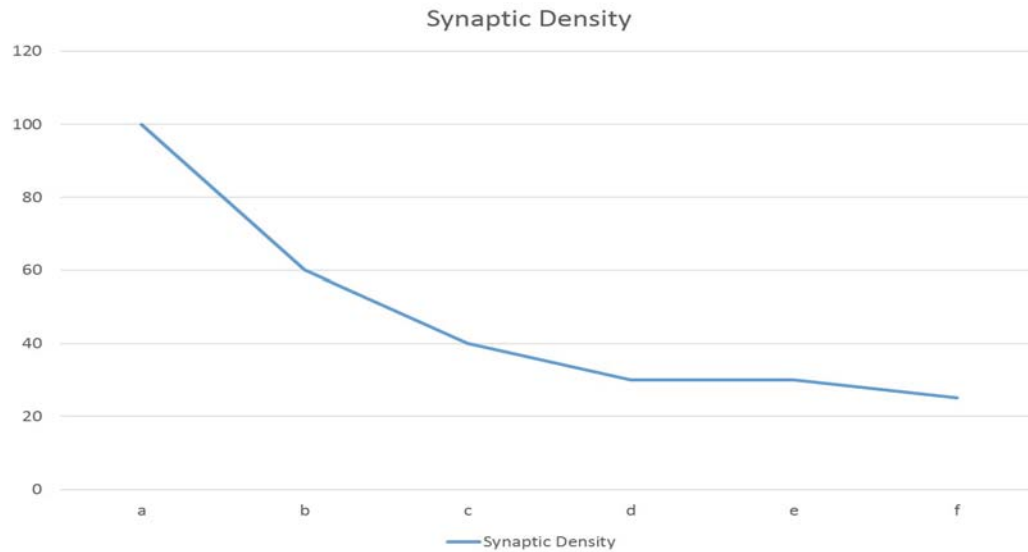
Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Neuro Final Review Version 1**

1. Your patient has had ischemia to the ACA. Which structure would suffer the most damage?
  - A. cingulate cortex
  - B. occipital lobe
  - C. thalamus
  - D. internal capsule
  
2. Your patient's MRI shows blood pooling in the epidural space. Which structure is most likely hemorrhaging?
  - A. A meningeal artery
  - B. A sinus
  - C. A cerebral artery
  - D. A bridging vein
  
3. A patient suffered a knife wound to the posterior thoracic wall - the sympathetic trunk was severed on one side. Which of the following is most likely? The patient...
  - A. has all autonomic loss on that side from the wound all the way down to S2.
  - B. has sympathetic nervous system loss on that side only at the level of the wound.
  - C. has all autonomic loss on that side only at the level of the wound.
  - D. has sympathetic nervous system loss on that side from the wound all the way down to S2.
  
4. Damage to the superior cerebellar peduncle would at least partially interrupt all of the following tracts EXCEPT the:
  - A. Rostral spinocerebellar tract
  - B. anterior spinocerebellar tract
  - C. posterior spinocerebellar tract
  - D. cerebellar efferents
  
5. Your patient suffered an infarct of the MCA over 24 hrs ago. His symptoms are getting worse. What is happening?
  - A. He has an uncal herniation
  - B. He is bleeding into the epidural space
  - C. He is having a progressive stroke
  - D. He is having a transient ischemic attack

6.

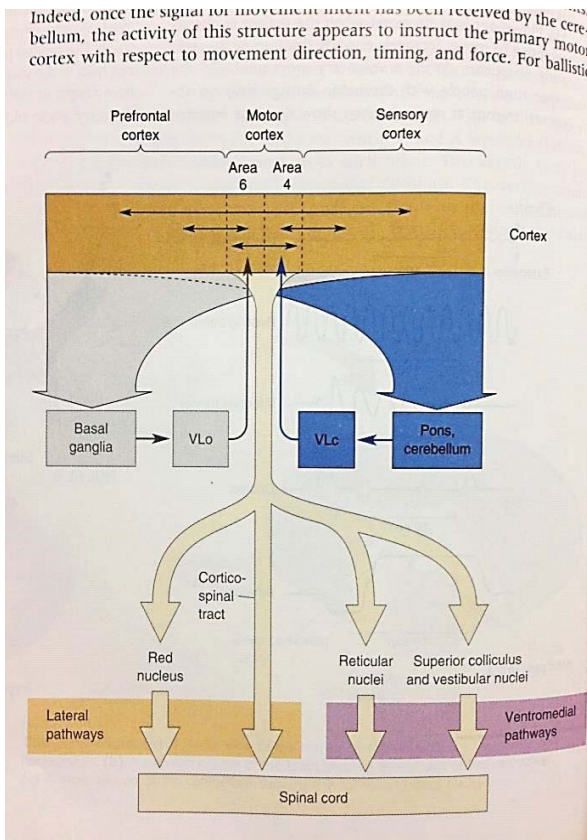


In the above graph, what age range is d-e?

- A. 16-25 years
  - B. 12-16 years
  - C. 25-35 years
  - D. 35-80 years
7. Which of the following pathways always has a soma in laminae 3 and 4?
- A. This is a trick question
  - B. Spinothalamic
  - C. Dorsal Column / Medial Lemniscus
  - D. Spinoreticular
8. If the VentroPosteroLateral (VPL) nucleus of the Thalamus is damaged, which of the following pathways would be interrupted?
- A. Dorsal Column / Medial Lemniscus
  - B. Trigeminal
  - C. Lateral CorticoSpinal
  - D. Spinocerebellar
9. Which of the following is TRUE concerning Wernicke's Area? It is...
- A. in the same area as Brodmann's areas 5-7
  - B. commonly damaged in strokes of the PCA
  - C. difficult for patients with Wernicke's aphasia because they are aware of their deficits
  - D. essential for understanding language

10. You have a patient with a drug addiction, currently in withdrawal due to hospitalization for a fractured fibula. Which of the following is true?
- A. The patient's dopamine levels to the basal ganglia are currently very high.
  - B. There are fewer dopamine receptors in the Nucleus Accumbens than a normal patient would have.
  - C. The patient is able to focus and direct attention as well as any other patient.
  - D. The patient's tolerance for pain is increased.
11. Which of the following areas of the cerebral cortex COULD NOT BE displayed in the graph above?
- A. Auditory areas
  - B. Visual areas
  - C. Motor areas
  - D. Association areas

12. Indeed, once the signal for movement ~~has~~ been received by the cerebellum, the activity of this structure appears to instruct the primary motor cortex with respect to movement direction, timing, and force. For ballistic



In the image above, which of the following is TRUE?

- A. The gray basal ganglia loop is continuously active before and during a movement.
- B. The big blue arrow from the cortex to the cerebellum represents the corticopontine and pontocerebellar tracts.
- C. The lateral pathways and ventromedial pathways descend in the middle of the spinal cord, in the gray matter.
- D. VLc in the image represents a subdivision of the hypothalamus.

13. Your patient has no sensory or motor in the L3 dermatome and myotome on the Right. Which of the following is most likely? This patient has damage to...
- A. the spinal cord at L2 on the Right.
  - B. the brainstem above the medulla on the Left.
  - C. the L3 spinal nerve on the Right.
  - D. the spinal cord at L2 on the Left.
14. Brodmann's areas 18 and 19 are aligned with which functional area?
- A. Primary visual
  - B. Primary auditory
  - C. Secondary visual
  - D. Gustatory
15. Which of the following is TRUE concerning the reticular formation?
- A. There are 3 major nuclei: raphe, PPN, and VTA
  - B. The reticular formation receives information directly from the amygdala
  - C. The raphe secretes norepinephrine and is involved in directing attention
  - D. When the PPN is inhibited more, the result will be low muscle tone in postural muscles