

9.10/9.100 REVIEW QUESTIONS

Somatosensory System

1. Name the four different types of tactile sensory receptors in the skin, and describe their response properties. What advantage is there in having such a variety of receptors?
2. What's the difference between protopathic and epicritic sensations? How are these sensations transmitted from the skin to the brain?
3. What is paradoxical cold?
4. How is somatosensory information organized in the spinal cord? In the brainstem? In the cortex? What does the organization at each level imply about the way that sensory information is processed?
5. What is two-point discrimination? Why are some body surfaces more sensitive than others (two explanations)?
6. What is the homunculus? What is the inverse magnification rule? What's the relationship between the two?
7. How can you tell where your limbs are in space? What parts of the thalamus and primary somatosensory cortex process this information?
8. What effect does nerve damage or amputation have on the somatosensory system? Describe physiological and perceptual effects.