

Homework Assignment - Module 9

1. [20 points] Which of the following statements about the autonomic nervous system is the most correct? Re-write the choices that, as written now, are wrong so that they will be correct once you change them.
 - A. Sympathetic preganglionic nerves are longer than parasympathetic preganglionic nerves.
 - B. ACh is the preganglionic neurotransmitter for the sympathetic and for the parasympathetic branches of the autonomic nervous system.
 - C. Parasympathetic postganglionic neurons arise from the paravertebral ganglia.
 - D. The parasympathetic postganglionic neurotransmitter is epinephrine.
2. [20 points] Heart rate varies with respiration, being higher during inspiration than expiration. Describe/discuss/explain the mechanism(s) involved.
3. [20 points] In video 3 of this Module there was a brief mention of atrial stretch receptors, but no details were provided. So – describe/explain the several physiological consequences of stimulating (stretching) the atrial stretch receptors and briefly discuss whether (or not) the physiological consequences are consistent with the original stimulus.