The Cardiovascular System: Factors That Affect Blood Pressure

1. What are the three main factors that influence total peripheral resistance (TPR)?

   a.

   b.

   c.

2. Name three hormones that act as vasoconstrictors.

   a.

   b.

   c.

3. Name two hormones that directly increase blood volume.

   a.

   b.

4. Track the effect on blood pressure by reducing venous return. Go through all the steps.

   ↓ VR →

5. Categorize the following into:

   A. Factors which increase blood pressure

   B. Factors that decrease blood pressure

   ____ ↓ arterial diameter ____ ↑ total vessel length

   ____ ↑vessel elasticity ____ ↓ plasma epinephrine

   ____ ↓ blood volume ____ ↓plasma angiotensin

   ____ ↑ stroke volume ____ ↑ plasma ADH

____ ↓blood viscosity

____ ↑ blood volume

____ ↑ parasympathetic stimulation

____ ↑ sympathetic stimulation

Use arrows in the spaces for questions 6 through 10.

6. A ↓ in hematocrit will result in ____ blood viscosity and ____ blood pressure.

7. Growth will result in ____ total vessel length and an ____ blood pressure.

8. Arteriosclerosis will result in ____ vessel elasticity and an ____ blood pressure.

9. Excessive sweating will result in a short term ____ in blood volume

   and a ____ in blood pressure.

10. An ↑ in epinephrine will result in ____ vessel diameter and an ____ in blood pressure.