**Suggested Answers to Discussion Topics, Chapter 20, Vital Signs, Height, and Weight**

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| Suggested Answers for Topics for Discussion | Learning Objective(s) |
| 1a. Students’ responses should include the following:   * Obtain an aural temperature by using a tympanic thermometer or a temporal artery thermometer to obtain a forehead temperature, because you: * cannot use the oral site as he is getting oxygen. * cannot use the rectal site because he has heart disease. * cannot use the axillary site because he is restless and cannot stay still for 10 minutes. * Take an apical pulse with a stethoscope because: * apical pulses are obtained if you cannot feel a radial pulse, and in persons with known heart disease. * The apical pulse is taken by placing the stethoscope over the apex of the heart and counting the number of heart beats heard per minute.   1b. Students’ responses should include the following:   * Obtain a blood pressure cuff that is the correct size for this gentleman. * Make sure the manometer is calibrated. * Place the cuff on his left arm. * Do not place the cuff over his clothing. * Set stethoscope earpieces properly in your ears. * Make sure the room is quiet. * Have the patient or resident assume a comfortable lying or sitting position with the forearm supported at the level of the heart and the palm of the hand facing upward. * Check to make sure the diaphragm of the amplifying device is turned on. * Place the diaphragm directly over the brachial artery. * Inflate the cuff to 30 mm Hg above the person’s known or heard systolic pressure. * Release the air slowly from the cuff, listening carefully for sounds. * If you make a mistake, release all the air from the cuff and wait at least 1 minute before trying again. | 4, 7, 8, 12 |
| 2a. Students’ responses should include the following:   * The temperature is within normal range for both sets of vital signs. He is afebrile. * The first pulse is within normal range for an adult. * The second pulse is higher than 100 and is called tachycardia. * The first respiratory rate is within normal range for an adult and is called eupnea. * The second respiratory rate is called tachypnea because it is greater than 24 breaths per minute. * Both blood pressures are within normal range for an adult. He is normotensive.   2b. Students’ responses should include the following:   * Both sets of vital signs should be reported, but the second set should be reported immediately. * The pulse may be elevated because tissues are not receiving enough oxygen and nutrients, or because of pain, fear, or anxiety. * Respiratory rate may be elevated because of his head injury, or it may be increased because of pain, fear, or anxiety. * The second blood pressure is within normal range but has dropped 30 mm Hg systolic and 20 mm Hg diastolic. A drop this large is a significant change from normal for this patient. * Blood pressure may be dropping because of decreased cardiac output or a decrease in the volume of blood available for the heart to pump. This may be due to hemorrhaging. | 2, 9, 13 |