Lab Quiz 02: Using LabQuest

Answer each of the following questions using the information you collected during the lab. Please submit your completed quiz before you leave the lab. No papers will be accepted after the end of the lab period.

1. (2 points) When you attach a sensor to the LabQuest unit,
   A) you always have to tell it which sensor you have connected and what data you want to collect.
   B) it should automatically recognize which sensor has been connected, and which data it will collect.
   C) it will automatically recognize the sensor, but you must always manually tell it what measurements to make.

2. (2 points) When pumping up the cuff, how much pressure should you use?
   A) Exactly 0 mm Hg  
   B) 50 mm Hg  
   C) 100 mm Hg  
   D) 150 mm Hg  
   E) 200 mm Hg  
   F) Any amount at all.

3. (2 points) When releasing the cuff pressure, at what point should you stop the data collection?
   A) You should not stop the collection, it will stop automatically after 10 minutes.
   B) When the cuff pressure decreases to about 100 mm Hg, stop collecting data.
   C) Wait until the cuff pressure has declined to about 50 mm Hg before hitting the stop button.
   D) Unless the cuff pressure is reduced to precisely zero, you will not get a proper blood pressure result.

4. (2 points) When you checked your blood pressure, which number was highest?
   A) Systolic pressure.  
   B) Diastolic pressure.  
   C) Pulse rate.

5. (8 points) Complete the table of measured blood pressure for two people at your lab table:

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>TV Cliché Example</th>
<th>Healthy Young Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Systolic Pressure (MM Hg)</strong></td>
<td>120</td>
<td>104</td>
</tr>
<tr>
<td><strong>Diastolic Pressure (MM Hg)</strong></td>
<td>80</td>
<td>64</td>
</tr>
</tbody>
</table>

6. (8 points) Using the grid on the right, draw and label the axes of your cooling curve, then sketch the shape of the graph of the data. Write the equation of the best-fit curve.

\[ y = A \exp(-Cx) + B \]

\[ A = 14.55 \]

\[ B = 23.50 \]

\[ C = 2.66 \]

\[ y = (14.55) \exp(-2.66x) + 23.50 \]

7. (2 points) Which curve fit your data the best?
   A) Natural exponent.
   B) Proportional.
   C) Quadratic.
   D) Linear.

8. (2 points) True or false: The LabQuest does not permit you to select a data range and perform a curve fit. It can only fit a curve if all of the points on the graph are used.

9. (2 points) True or false: When you are collecting data over a timed interval, tapping the STOP button at the bottom left corner pauses the timer, and you can resume data collection by tapping the button one more time.