Module 5 Confirmation Test Review

1. Given the graph
   a. Find the slope of the line.
   b. State the y-intercept of the line.
   c. State the x-intercept of the line.
   d. Write an equation that describes the points on the line.

![Graph](image)

2. a. Construct a table of values that satisfy the linear equation $5x - 2y = 12$.

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Graph the line.
c. What is the slope of this line?

![Graph](image)
3. Graph the line $y = -3x - 4$ using the slope and y-intercept.

4. Graph the line $6x - 3y = 12$ using the two intercepts.
5. Kathy earns $25 an hour tutoring and $10 an hour babysitting.

   a. Write an inequality in two variables for the number of hours she needs to work at each job if she wants to earn at least $900.

   b. Graph the inequality.

   c. Give three possible solutions to the inequality.

![Graph showing inequality]

6. (Choose all that apply) A graph showing height of a person for different ages is shown below. Choose the correct description(s) from the following choices:

   ![Graph showing height vs age]

   A. Height is a function of age.
   B. Age is a function of height.
   C. This is the graph of a function.
   D. The graph fails the vertical line test.
   E. Height is the independent variable.
   F. Height is the dependent variable.
7. Identify whether the following two lines are parallel, perpendicular, or neither.

\[ 3x + 2y = 7 \]
\[ y = \frac{2}{3}x + 7 \]

8. Graph the following equation and inequality.

a) \[ 2x + 8 = 0 \]

b) \[ -3y + 6 > 0 \]
1. a) \(-\frac{3}{2}\)  
   b) \((0, 4)\)  
   c) \((2.7, 0)\)  
   d) \(y = -\frac{3}{2}x + 4\)

2a.

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-11</td>
</tr>
<tr>
<td>0</td>
<td>-6</td>
</tr>
<tr>
<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

2b. \(\frac{5}{2}\)

2c.

![Graph of a linear equation](image)

3.

![Graph of a linear equation](image)

4.

![Graph of a linear equation](image)
5. a) $25x + 10y \geq 900$
   b) 13b.

c) examples of possible solutions include:
   (40, 10) 40 hours of tutoring and 10 hours of babysitting
   (0, 90) 90 hours of babysitting
   (30, 30) 30 hours of each

6. A, C, F
7. perpendicular

8. a) 

8. b) 