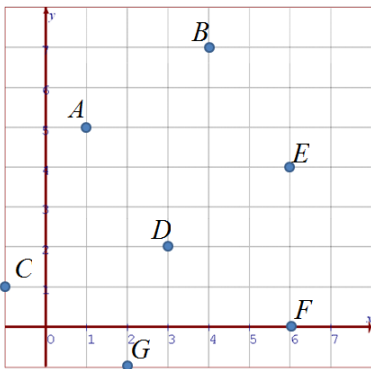


Name: _____

Date: _____

Math 8 HW Section 10.1 Linear Relations

1. Given the following grid, find the coordinates of each of the following points



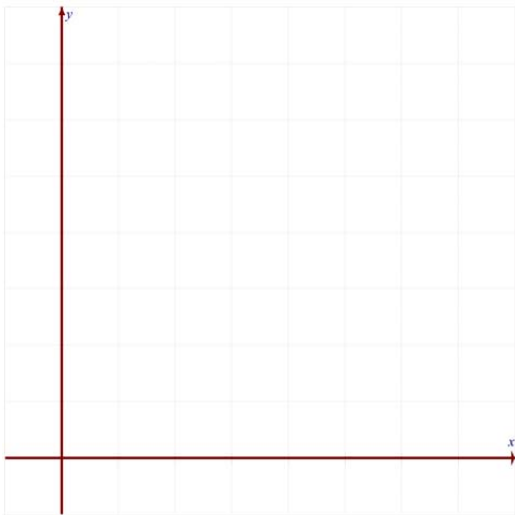
$A(\quad , \quad)$ $B(\quad , \quad)$
 $C(\quad , \quad)$ $D(\quad , \quad)$
 $E(\quad , \quad)$ $F(\quad , \quad)$
 $G(\quad , \quad)$

2. Given each graph, fill in the table of values given:

<p>a)</p>	<p>b)</p>																								
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 5px;"><i>Cost</i></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> <tr> <td style="padding: 5px;"><i># Baskets</i></td> <td style="padding: 5px;">1</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;">8</td> </tr> </table>	<i>Cost</i>						<i># Baskets</i>	1	2	3	4	8	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 5px;"><i># People</i></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> <tr> <td style="padding: 5px;"><i># Cars</i></td> <td style="padding: 5px;">1</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;">5</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;">20</td> </tr> </table>	<i># People</i>						<i># Cars</i>	1	4	5	6	20
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<i># Baskets</i>	1	2	3	4	8																				
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<i># Cars</i>	1	4	5	6	20																				
<p>How much does it cost to buy 10 basketballs?</p> <p>If you had \$100, how many basketballs can you buy?</p> <p>Write an equation for the relationship between the cost and the number of basketballs</p>	<p>How many people can each car take?</p> <p>How many cars will you need for 85 people?</p> <p>Write an equation for the number of people and the number of cars required:</p>																								

3. For the two graphs above, should we connect the dots? Explain why or why not.

4. Given each scenario, indicate whether it is a linear relationship or not. If not, explain why:
- i) Tim saves 3.25 each day and puts it in his piggy bank. The relationship between the number of days and how much he saves.
 - ii) The number of people in a school doubles every day for 12 straight weeks. The relationship between the number of people vs the number of weeks.
 - iii) The side length of a square and the perimeter of a square
 - iv) The side length of a cube and the volume of a cube
5. Jason owns a JappaDog stand and sells hotdogs at \$3.50 each. Make a TOV for the first twenty hotdogs that he sells. Use the graph to illustrate his revenue. Label the graph.



6. A taxi driver charge \$1.50 for the first minute and then \$.80 for each additional km he travels. Make a TOV for the first 10km and then draw a graph to illustrate the relationship.

