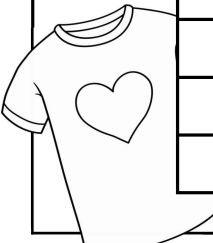
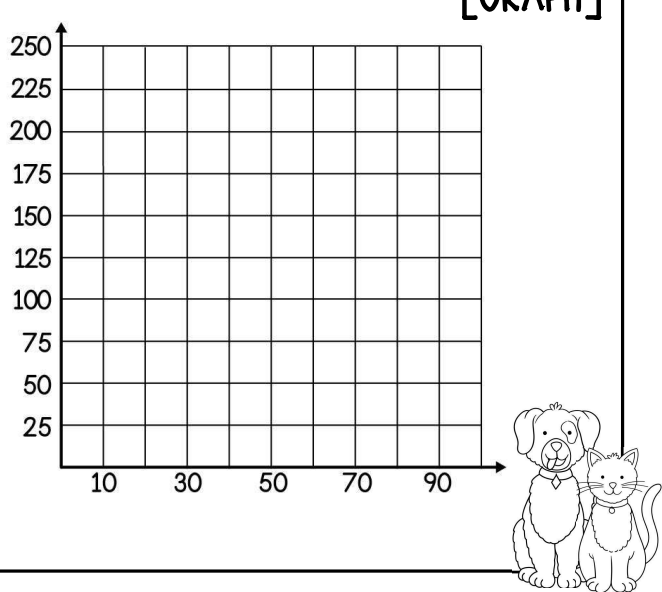


# REPRESENTING PROPORTIONAL RELATIONSHIPS

Practice representing proportional relationships in multiple ways with the following examples. Use the representation given to help you fill in the others.

<p><b>[VERBAL DESCRIPTION]</b></p> <p>The student council is selling t-shirts to raise awareness for the local animal shelter. For each t-shirt they sell, they will donate \$5.00.</p>	<p><b>[EQUATION]</b></p>																
<p><b>[TABLE]</b></p> <table border="1" style="margin-left: 20px; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th># OF SHIRTS SOLD</th> <th>DOLLARS DONATED</th> </tr> </thead> <tbody> <tr><td>0</td><td></td></tr> <tr><td>10</td><td></td></tr> <tr><td>20</td><td></td></tr> <tr><td>30</td><td></td></tr> <tr><td>40</td><td></td></tr> <tr><td>50</td><td></td></tr> <tr><td>60</td><td></td></tr> </tbody> </table> 	# OF SHIRTS SOLD	DOLLARS DONATED	0		10		20		30		40		50		60		<p><b>[GRAPH]</b></p> 
# OF SHIRTS SOLD	DOLLARS DONATED																
0																	
10																	
20																	
30																	
40																	
50																	
60																	

Use the representations in the example above to answer 1-5.

<p>1. Describe how you know that the above situation is proportional.</p>	<p>2. Find the constant of proportionality.</p>	<p>3. What does the rate of change represent in this situation?</p>
<p>4. What does the ordered pair (10, 50) represent in the context of the situation?</p>	<p>5. If the student council sells 80 t-shirts, how much will they donate to the animal shelter?</p>	

Use the given information for each situation below to fill in the missing representations.

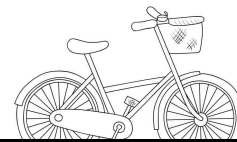
<p><b>[VERBAL DESCRIPTION]</b></p>	<p style="text-align: right;"><b>[EQUATION]</b></p> <p style="text-align: center;"><math>y = 3x</math></p>																
<p><b>[TABLE]</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">HOURS</th> <th style="padding: 5px;"># OF PUMPKINS</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td></td></tr> <tr><td style="text-align: center;">2</td><td></td></tr> <tr><td style="text-align: center;">3</td><td></td></tr> <tr><td style="text-align: center;">4</td><td></td></tr> <tr><td style="text-align: center;">5</td><td></td></tr> <tr><td style="text-align: center;">6</td><td></td></tr> <tr><td style="text-align: center;">7</td><td></td></tr> </tbody> </table>	HOURS	# OF PUMPKINS	1		2		3		4		5		6		7		<p style="text-align: right;"><b>[GRAPH]</b></p> <p style="text-align: center;"><b>JACK'S HALLOWEEN DECORATING</b></p>
HOURS	# OF PUMPKINS																
1																	
2																	
3																	
4																	
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7																	

<p><b>[VERBAL DESCRIPTION]</b></p>	<p style="text-align: right;"><b>[EQUATION]</b></p>														
<p><b>[TABLE]</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">HOURS</th> <th style="padding: 5px;">MILES</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">2</td><td></td></tr> <tr><td style="text-align: center;">4</td><td></td></tr> <tr><td style="text-align: center;">6</td><td style="text-align: center;">9</td></tr> <tr><td style="text-align: center;">8</td><td></td></tr> <tr><td style="text-align: center;">10</td><td></td></tr> <tr><td style="text-align: center;">12</td><td style="text-align: center;">18</td></tr> </tbody> </table>	HOURS	MILES	2		4		6	9	8		10		12	18	<p style="text-align: right;"><b>[GRAPH]</b></p> <p style="text-align: center;"><b>JAGUAR'S DAILY MOVEMENT</b></p>
HOURS	MILES														
2															
4															
6	9														
8															
10															
12	18														

Summarize today's lesson:

# REPRESENTING PROPORTIONAL RELATIONSHIPS

Shoreside Bikes is a bike rental company that charges tourists by the hour as shown in the table. Use the table to fill in the missing representations.



<p><b>[VERBAL DESCRIPTION]</b></p>	<p><b>[EQUATION]</b></p>																
<p><b>[TABLE]</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">HOURS</th> <th style="padding: 5px;">COST (\$)</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td></td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">\$24</td></tr> <tr><td style="text-align: center;">3</td><td></td></tr> <tr><td style="text-align: center;">4</td><td></td></tr> <tr><td style="text-align: center;">5</td><td></td></tr> <tr><td style="text-align: center;">6</td><td></td></tr> <tr><td style="text-align: center;">7</td><td style="text-align: center;">\$84</td></tr> </tbody> </table>	HOURS	COST (\$)	1		2	\$24	3		4		5		6		7	\$84	<p><b>[GRAPH]</b></p> <p style="text-align: center;"><b>SHORESIDE BIKES</b></p>
HOURS	COST (\$)																
1																	
2	\$24																
3																	
4																	
5																	
6																	
7	\$84																



- |  |   |
|--|---|
| <p>1. What is the rate of change and what does it represent in this situation?</p>   | <p>2. What does the point (7, 84) represent in this situation?</p>                    |
| <p>3. The bike rental company has determined that they will charge based on the nearest half hour. If Mikala rented a bike for 5.5 hours, how much would she be charged?</p> | <p>4. If a customer has \$50.00 to spend, how many hours can they rent a bicycle?</p> |