Graphing Equivalent Ratios and Rates

1. King crabs are one of the most sought-after shellfish in the ocean. Due to their large size and sweet taste, fisherman can earn $4 for each pound of king crab caught.

The cost of $4 per pound is a rate. Complete the table to find equivalent rates.

Weight (lb)	**1**	**2**	**3**	**4**	**5**	**6**
Amount Earned ($)	**4**					

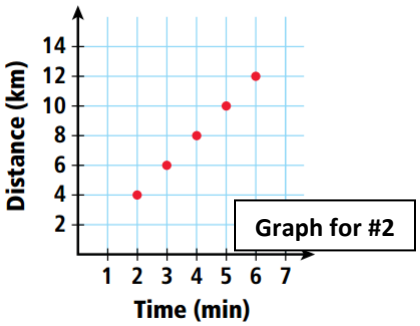
Next graph the data on the coordinate plane.

a. Make a coordinate plane. (You only need the first quadrant.) Since the amount earned depends on the weight, the x-axis should be the weight and the y-axis should be the amount earned. Be sure to title and label your graph clearly.

b. Plot the rates. The weight will be the x-coordinate and the amount earned will be the y-coordinate. For example the coordinates for the $4 per pound are (1, 4). Connect all the coordinates.

Finally, describe the pattern that you see.

2. Use the graph to find three equivalent ratios. Then identify the unit rate.



Graph for #2

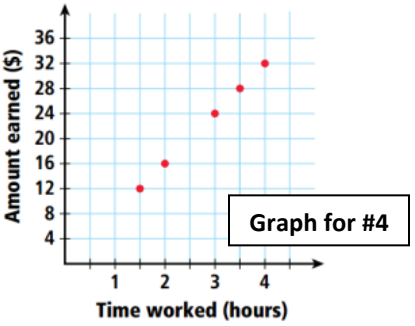
3. A satellite orbits Earth every 1.5 hours.

a. Create a table with 6 equivalent ratios.

b. Plot your points on a coordinate graph.

c. Jasmine determines that a satellite orbits Earth 15 times every 10 hours. What error did Jasmine make?

4. List 3 equivalent ratios from the graph. What is the unit rate?



Graph for #4

5. Complete the table to find the missing ratios.

Teachers	**1**	**3**	**7**	
Students	**18**	**54**		**180**