$\qquad$
$\qquad$

## Lesson 6 Homework Practice

## Graphing Proportional Relationships

Determine whether each relationship is proportional by graphing on a coordinate plane. Explain your reasoning.

1. | Number of Sandwiches | 1 | 5 | 10 | 15 | 20 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cost (\$) | 3 | 13.75 | 25 | 33.75 | 40 |
2. 

| Time (hr) | 0 | 1 | 2 | 3 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of Gallons | 0 | 600 | 1200 | 1800 | 2400 |

Find and interpret the constant of proportionality.
3. The number of gallons of paint required is proportional for the number of square feet of surface to be painted. The graph shows the relationship (square feet, number of gallons).

4. The formula for the area $A$ of a rectangle with a length of 5 inches is $A=5 w$, where $w$ is the width in inches. Make a table showing the area of the rectangles with a 5 -inch length and a width of $2,4,6$, and 8 inches. Then graph the ordered pairs. Determine whether the area of all rectangles with a length of 5 inches is proportional to the width in inches. Explain your reasoning.

