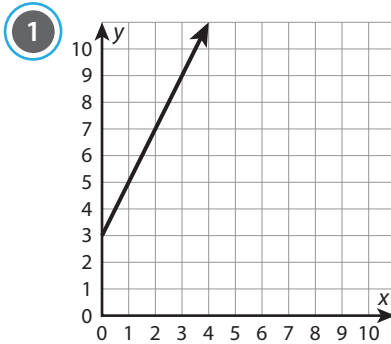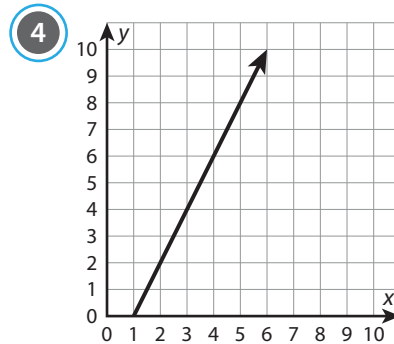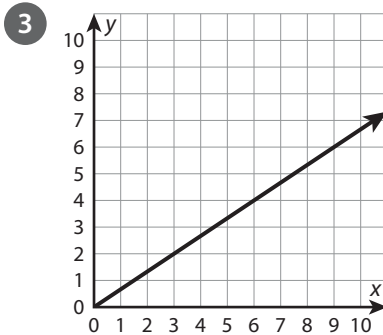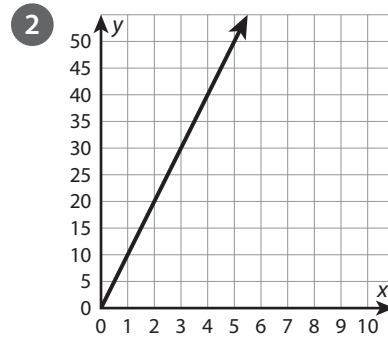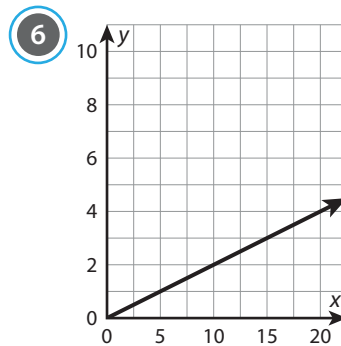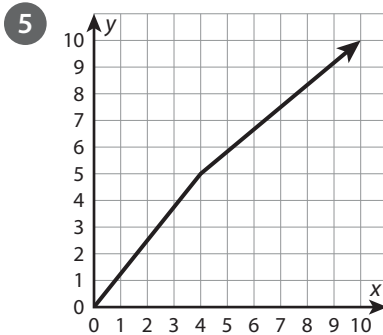# Recognizing Graphs of Proportional Relationships

➤ **Circle all the problems with graphs that do NOT represent a proportional relationship. For the problems that are circled, explain why the graphs do not represent a proportional relationship.**

1

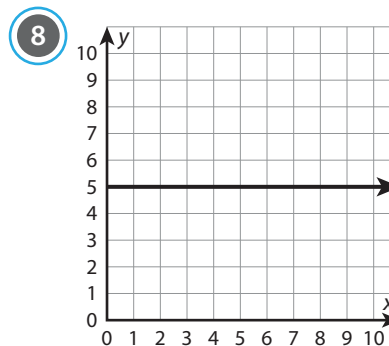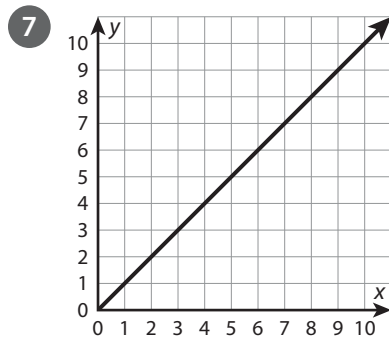The graph does not go through the origin.

2

3

4

The graph does not go through the origin.

5

6

The *x*-values do not change as the *y*-values increase.

Recognizing Graphs of Proportional Relationships *continued*

7

_____

8

The *y*-values do not change as the *x*-values increase.

9

The graph is not a straight line.

10
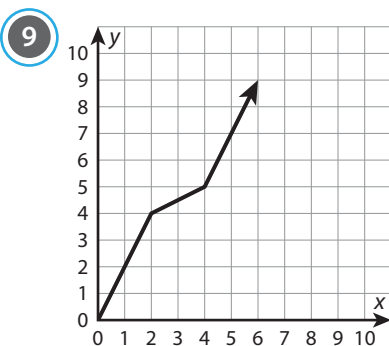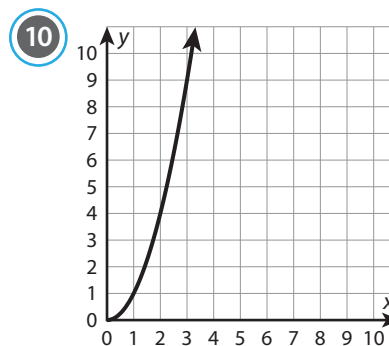
The graph is not a straight line.

11 Without analyzing specific points on a graph, explain how you know whether a graph shows a proportional relationship.

Possible answer: The graph of a proportional relationship is a straight line that passes through the origin, with all points on the line representing equivalent ratios.