

Name _____

2-6B Lesson Master

Questions on SPUR Objectives

See Student Edition pages 143–147 for objectives.

VOCABULARY

- Multiple Choice** Which is an equation for a *hyperbola*? _____
 A $y = \frac{2}{x}$ B $y = \frac{x}{2}$ C $y = 2x$ D $y = \frac{2}{x^2}$
- Fill in the Blank** The two separate parts of a hyperbola are called _____.
- Name the *asymptotes* of the graph of $y = \frac{2}{x^2}$. _____

PROPERTIES Objective E

Multiple Choice In 4–11, consider the graphs of these equations. There may be one or more correct answers.

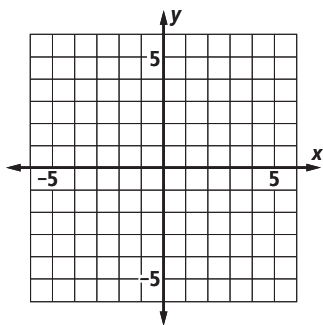
- A $y = kx$ B $y = kx^2$ C $y = \frac{k}{x}$ D $y = \frac{k}{x^2}$

- Which graphs have exactly one line of symmetry? _____
- Which graphs have two symmetry lines? _____
- Which graphs have asymptotes? _____
- When $k < 0$, which graphs have some points in the first quadrant? _____
- Which graphs have more than one part? _____
- When $k < 0$, which graphs have points in the fourth quadrant? _____
- When $k > 0$, which graphs have points in the third quadrant? _____
- Which graphs are hyperbolas? _____
- True or False** Graphs of all variation functions pass through the point (0, 0). _____

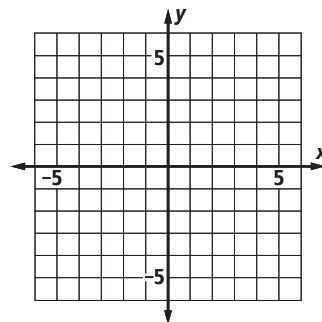
REPRESENTATIONS Objective I

In 13–16, graph the equation.

13. a. $y = \frac{8}{x}$



14. $y = -\frac{8}{x}$

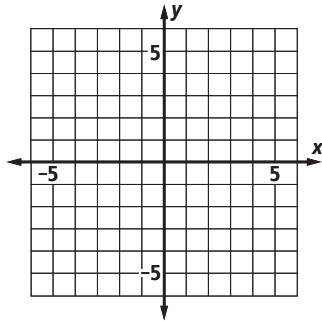


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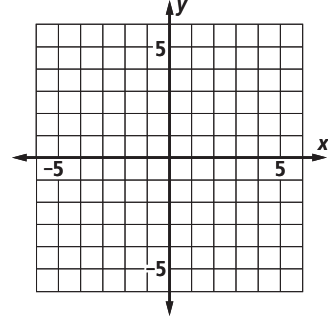
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15. $y = \frac{8}{x^2}$



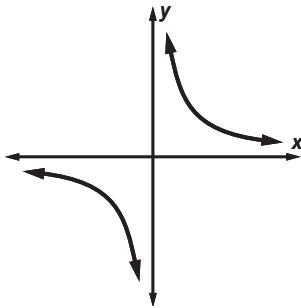
16. $y = -\frac{8}{x^2}$



REPRESENTATIONS Objective J

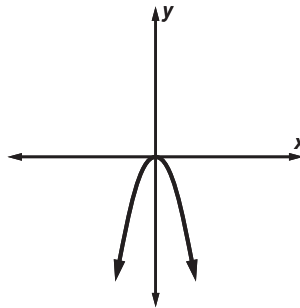
Multiple Choice In 17–22, Choose the equation whose graph is most like the one shown. Assume that the axes have the same scale.

17. _____



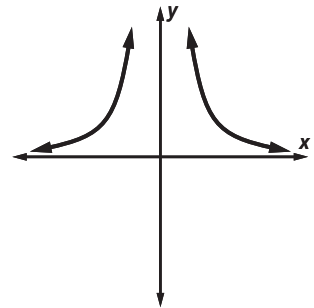
- A $y = -\frac{3}{x}$
- B $y = 3x^2$
- C $y = -\frac{3}{x^2}$
- D $y = \frac{3}{x}$

18. _____



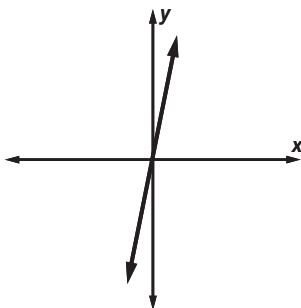
- A $y = 2x^2$
- B $y = -2x^2$
- C $y = \frac{2}{x^2}$
- D $y = \frac{2}{x}$

19. _____



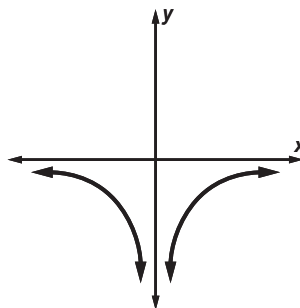
- A $y = \frac{7}{x^2}$
- B $y = -7x^2$
- C $y = -\frac{7}{x^2}$
- D $y = 7x^2$

20. _____



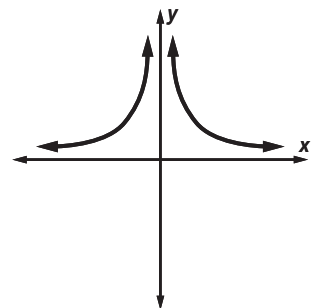
- A $y = \frac{5}{x^2}$
- B $y = 5x$
- C $y = \frac{5}{x}$
- D $y = 5x^2$

21. _____



- A $y = \frac{12}{x^2}$
- B $y = -12x^2$
- C $y = -\frac{12}{x^2}$
- D $y = 12x^2$

22. _____



- A $y = \frac{6}{x}$
- B $y = 6x^2$
- C $y = -\frac{6}{x^2}$
- D $y = \frac{6}{x^2}$