

pg. 488 # 1-24

4. $y = \frac{3}{x}$ | $y = \frac{5}{x}$

same

2 branches
QI & QIII

different

$k=3$

$k=5$

curve is
farther
from origin

10. $P=500$ lb. solve for D .
(or use EC like directions)

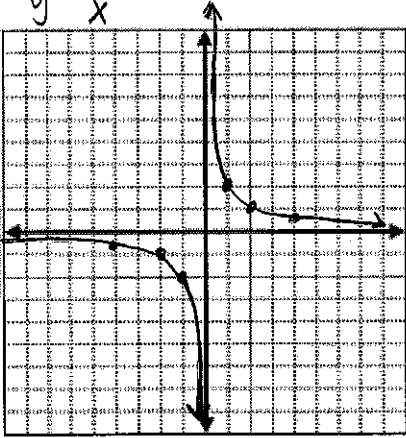
$$\frac{500}{1} = \frac{9200}{D}$$

$$\frac{500D}{500} = \frac{9200}{500}$$

$$D = 18.4 \text{ feet}$$

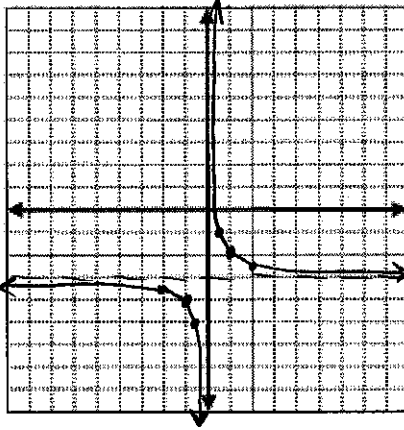
22. $y = \frac{2}{x-0} + 4 \rightarrow y = \frac{2}{x} + 4$

$y = \frac{2}{x}$

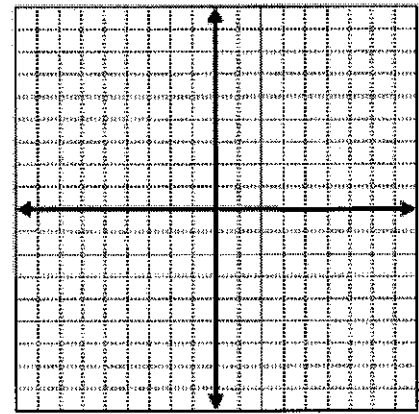
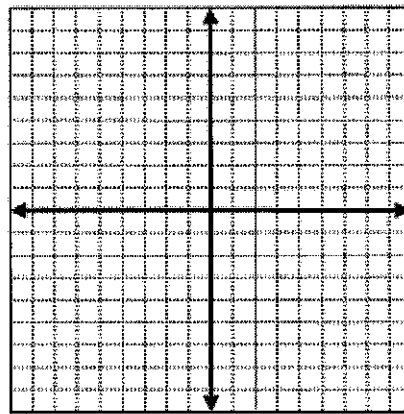
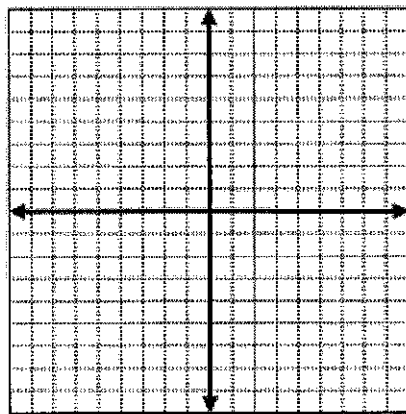
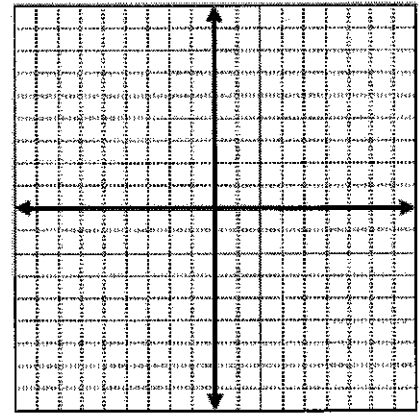
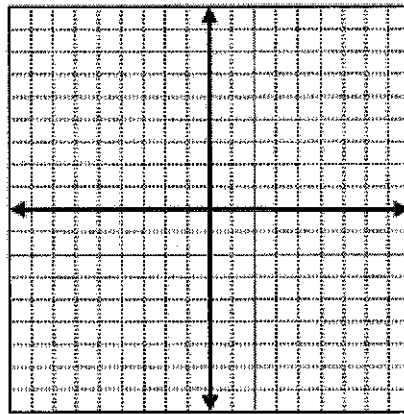
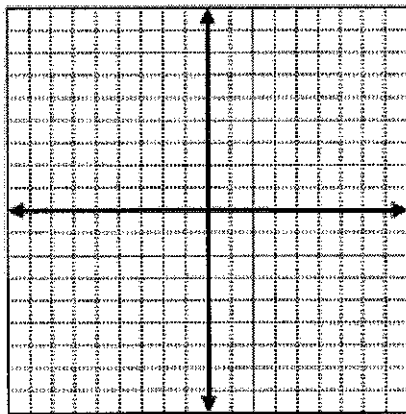
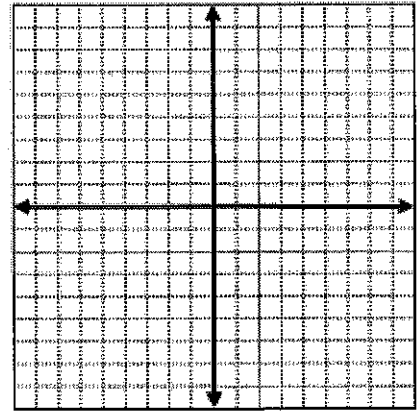
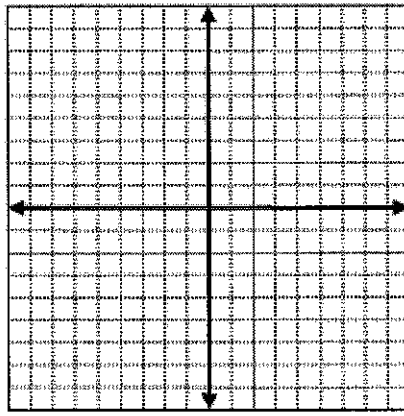
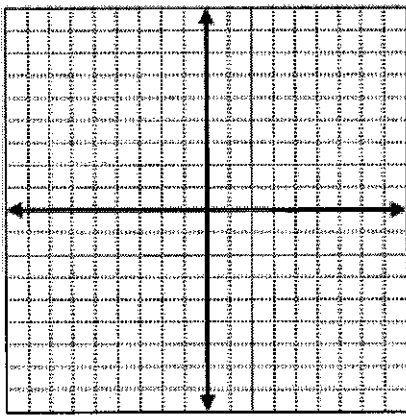
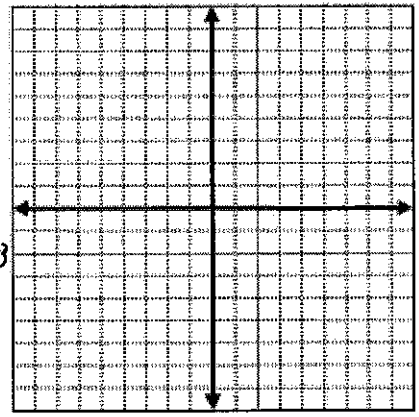


14.

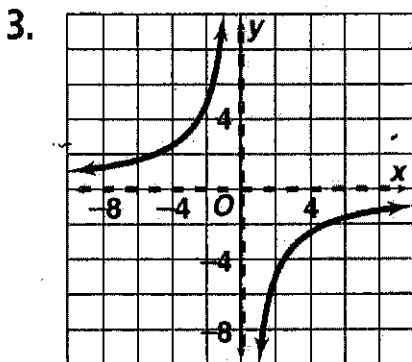
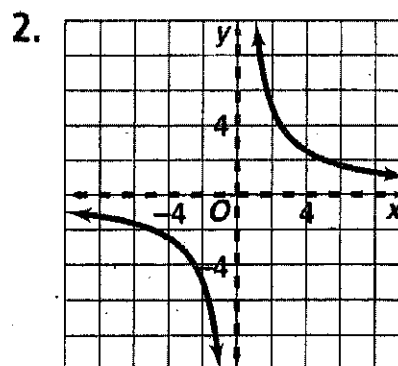
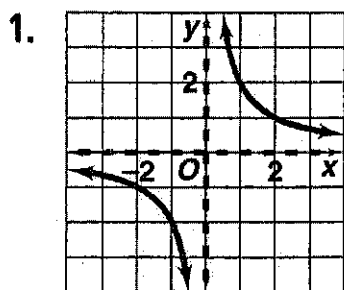
VA \leftarrow



$x = 3$

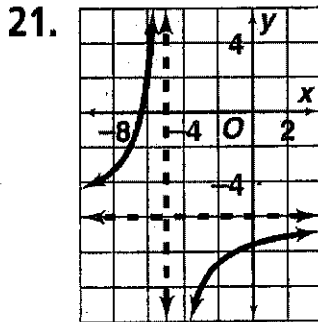
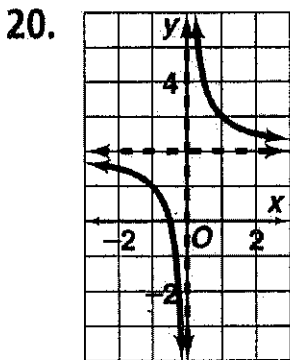
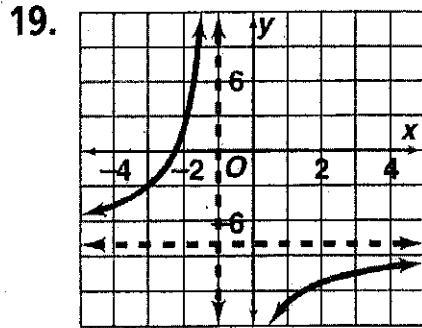
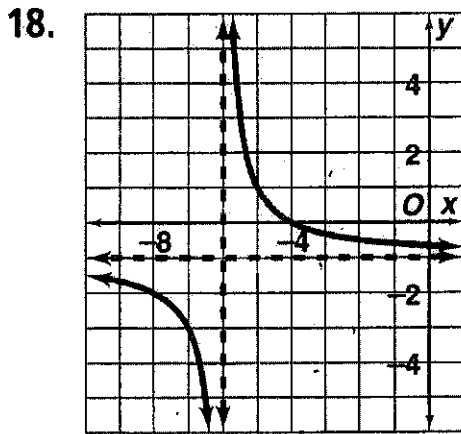
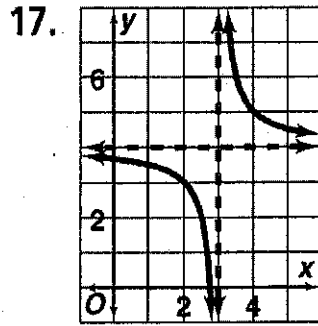
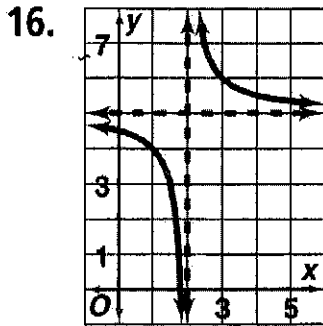
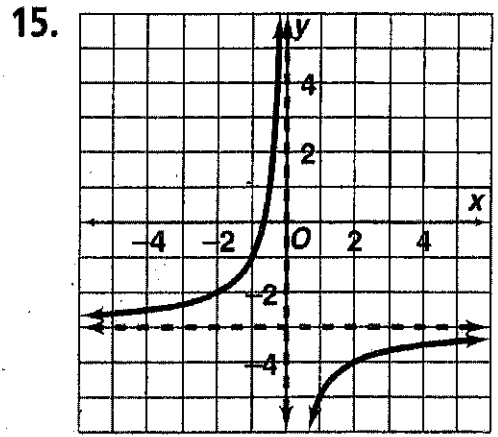
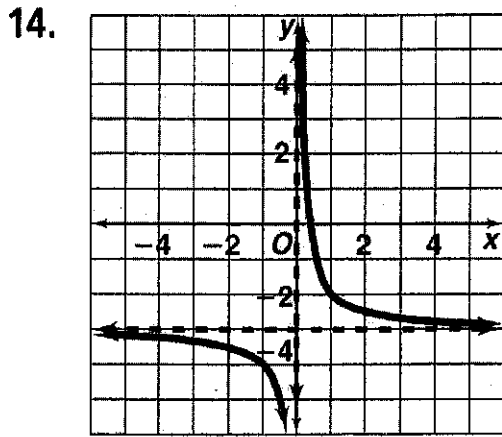


Answers for Lesson 9-2, pp. 488–490 Exercises



4. The graph of $y = \frac{3}{x}$ is closer to the x - and y -axes than the graph of $y = \frac{5}{x}$.
 5. The graph of $y = \frac{1}{x}$ is closer to the axes.
 6. The graph of $y = \frac{0.2}{x}$ is closer to the axes.
 7. The branches of $y = \frac{8}{x}$ are in Quadrants I and III. The branches of $y = -\frac{8}{x}$ are in Quadrants II and IV. Each graph is a 90° rotation about the origin of the other graph.
 8. The graphs of both equations are in Quadrants II and IV. The graph of $y = -\frac{2}{x}$ is closer to the axes.
 9. The branches of $y = \frac{12}{x}$ are in Quadrants I and III. The branches of $y = -\frac{12}{x}$ are in Quadrants II and IV. Each graph is a 90° rotation about the origin of the other graph.
10. 18.4 ft
11. 7.67 ft
12. 3.83 ft
13. 1.84 ft

Answers for Lesson 9-2, pp. 488–490 Exercises (cont.)



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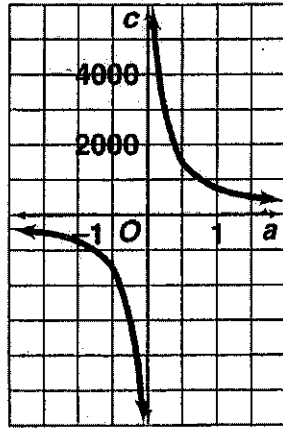
Answers for Lesson 9-2, pp. 488–490 Exercises (cont.)

22. $y = \frac{2}{x} + 4$

23. $y = \frac{2}{x+2} + 3$

24. $y = \frac{2}{x-4} - 8$

25. a. $c = \frac{750}{a}$



$a = 0, c = 0$

b. Answers may vary. Sample: If the number of awards is large, the amount of money available for each award approaches 0. If there are a small number of awards, then the amount of money available for each award gets larger.

26. Check students' work.

27. $y = \frac{0.5}{x}$

28. $y = \frac{0.75}{x}$

29. $y = \frac{-8.\bar{3}}{x}$

30. $y = \frac{-0.01}{x}$

31. $y = \frac{4}{x}$

32. $y = \frac{-1.4}{x}$

