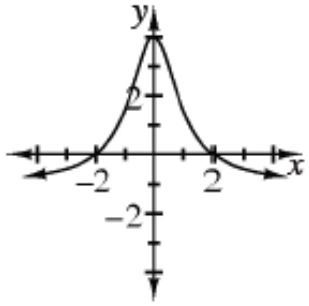
Lesson 1.2.4

1-111. See table and graph below, D: $-\infty < x < \infty$, R: $-1 < y \leq 4$, symmetrical about the y-axis, maximum: (0, 4), asymptote: $y = -1$

x	y
−3	−0.5
−2	0
−1	1.5
0	4
1	1.5
2	0
3	−0.5



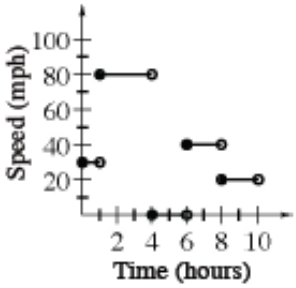
Review & Preview

1-112. See below:

a. A portion of the trip at a specific speed.

b. About 400 miles. It is the total distance on the graph.

c. Graph shown below – a speed of approximately 30 mph for 1 hour, approximately 80 mph for the next 3 hours, 0 mph for 2 hours, approximately 40 mph for 2 hours, and then approximately 20 mph for the last 2 hours. Note that the step graph assumes instantaneous change of speed, which is not technically possible.



1-113. See below:

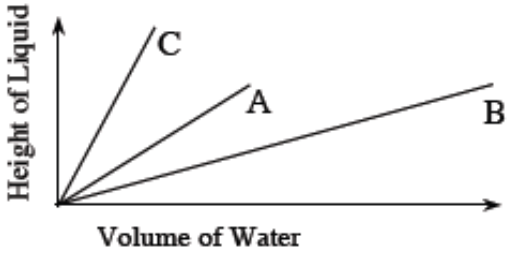
a. $x = 2$

b. $x = 4$

1-114. $m\measuredangle B = 39.8°$, $\sqrt{244} \approx 15.62$

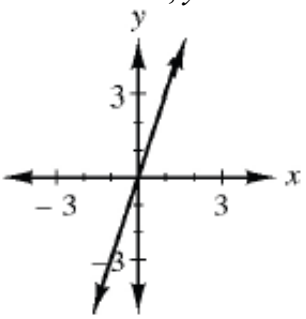
1-115. 56 inches

1-116. The independent variable is the volume of water; the dependent variable is the height of the liquid. The graph is 3 line segments starting at the origin. C is the steepest, and B is the least steep.



1-117. Diagrams vary; graph and table below, $y = 3x$.

x	y
1	3
2	6
3	9



1-118. See below:

a. $\frac{1}{26}$

b. $\frac{1}{25}$