Lesson 1.1.1

1-2. See below:

a. The correct order is $g(x) = -(x-2)^2$, $k(x) = -\frac{x}{2} - 1$, $h(x) = 2^x - 7$, $f(x) = \sqrt{x}$

b. The correct order is $f(x) = \sqrt{x}$, $g(x) = -(x-2)^2$, $k(x) = -\frac{x}{2} - 1$, $h(x) = 2^x - 7$

Review & Preview

1-4. See below:

a. $\frac{1}{2}$

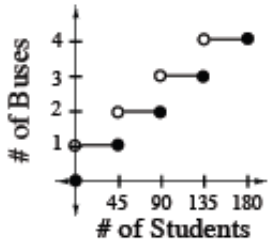
b. 3

1-5. See below:

a. *h(x)* then *g(x)*

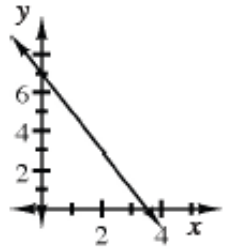
b. Yes, *g(x)* then *h(x)*

1-6. See graph below.

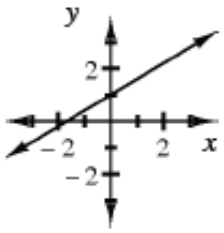


1-7. See below:

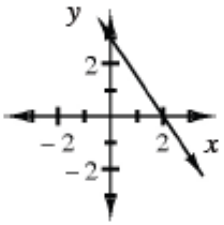
a.



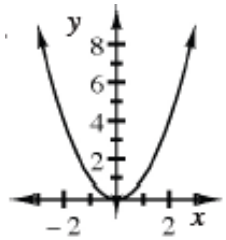
b.



c.



d.



1-8. See below:

a. Not linear.

b. The exponent.

c. A parabola.

1-9. Sample answer: $y = mx + b$ is a line, b represents the y-intercept, m represents the slope and (x, y) is the ordered pair for every point on the line.