3. absolute value; The graph is a vertical stretch with a
   translation 2 units left and 8 units down; The domain of each
   function is all real numbers, but the range of f is $y \geq -8$, and
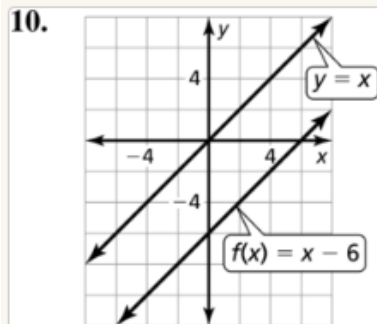   the range of the parent function is $y \geq 0$.

4. quadratic; The graph is a reflection in the x-axis with a
   vertical stretch and a translation 3 units up; The domain of
   each function is all real numbers, but the range of f is $y \leq 3$,
   and the range of the parent quadratic function is $y \geq 0$.

5. linear; The graph is a vertical stretch and a translation 2 units
   down; The domain and range of each function is all real
   numbers.

6. constant; The graph is a translation 2 units up; The domain of
   each function is all real numbers, but the range of f is
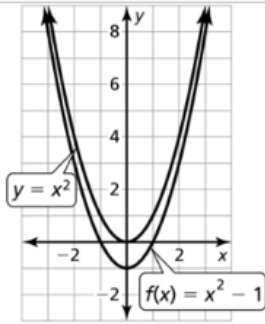 $y = 3$, and the range of the parent function is $y = 1$.

9.
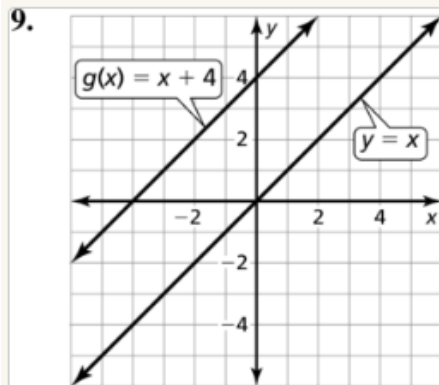
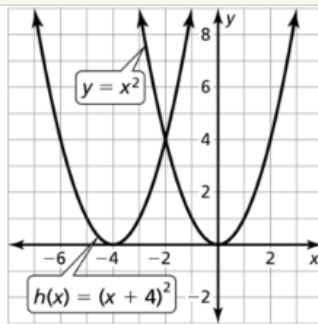The graph of g is a vertical translation 4 units up of the parent
linear function.

10.

The graph of f is a vertical translation 6 units down of the
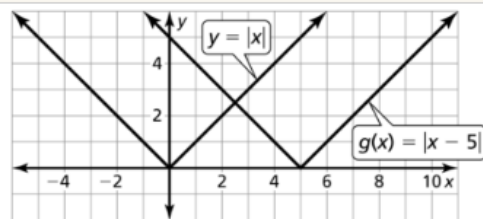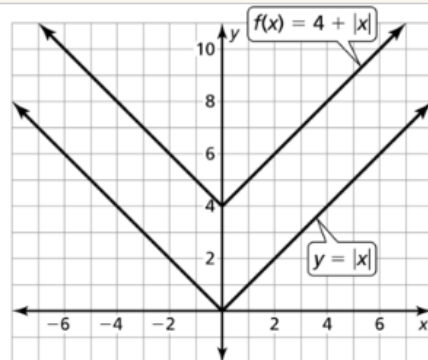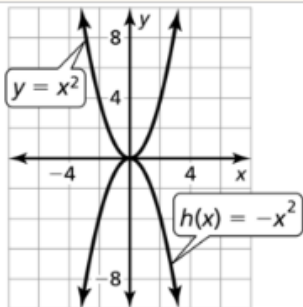parent linear function.

Answers to Algebra 2 L1.1 Parent Functions and Transformations Pg 8, #3-6, 9-18, 19-33 odd

11.

$y = x^2$

$f(x) = x^2 - 1$

The graph of f is a vertical translation 1 unit down of the parent quadratic function.

12.

$y = x^2$

$h(x) = (x + 4)^2$

The graph of h is a horizontal translation 4 units left of the parent quadratic function.

13.

$y = |x|$

$g(x) = |x - 5|$

The graph of g is a horizontal translation 5 units right of the parent absolute value function.

14.

$f(x) = 4 + |x|$

$y = |x|$

The graph of f is a vertical translation 4 units up of the parent absolute value function.

15.

$y = x^2$

$h(x) = -x^2$

The graph of h is a reflection in the x-axis of the parent quadratic function.

16.

$y = x$

$g(x) = -x$
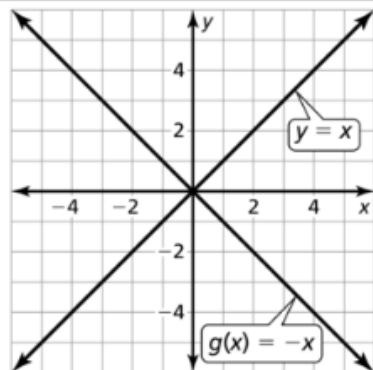
The graph of g is a reflection in the x-axis of the parent linear function.

17.

$f(x) = 3$

$y = 1$
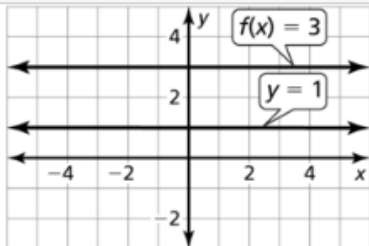
The graph of f is a vertical translation 2 units up of the parent constant function.

18.

$y = 1$

$f(x) = -2$
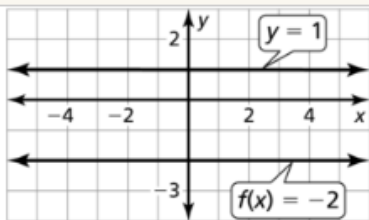
The graph of f is a vertical translation 3 units down of the parent constant function.

Answers to Algebra 2 L1.1 Parent Functions and Transformations Pg 8, #3-6, 9-18, 19-33 odd
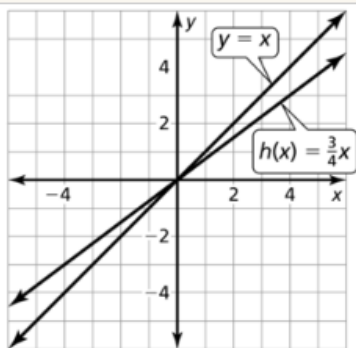
19.
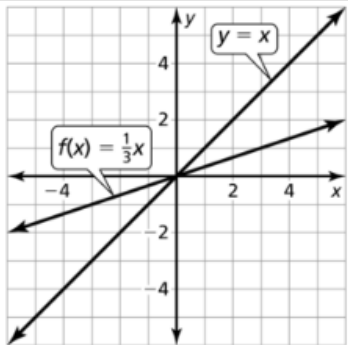
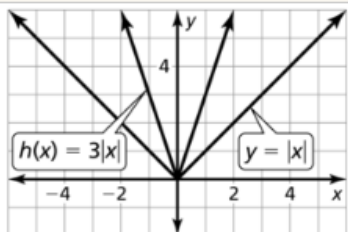The graph of f is a vertical shrink of the parent linear function.

21.
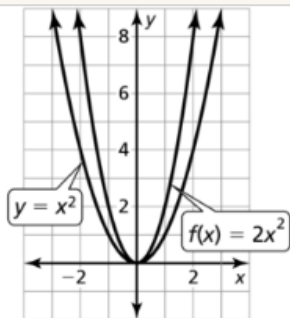
The graph of f is a vertical stretch of the parent quadratic function.
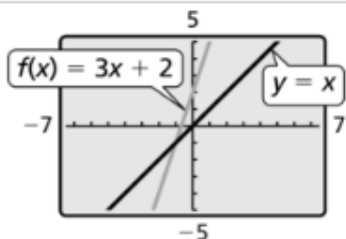
23.

The graph of h is a vertical shrink of the parent linear function.
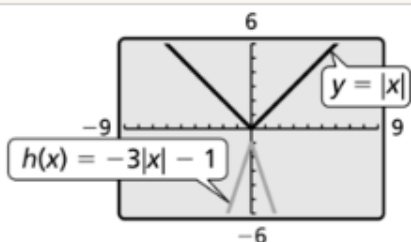
25.

The graph of h is a vertical stretch of the parent absolute value function.
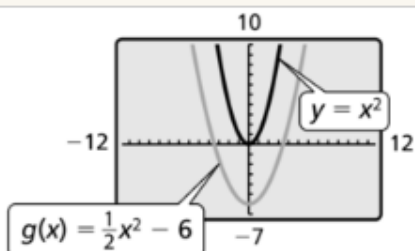
27.

The graph of f is a vertical stretch followed by a translation 2 units up of the parent linear function.
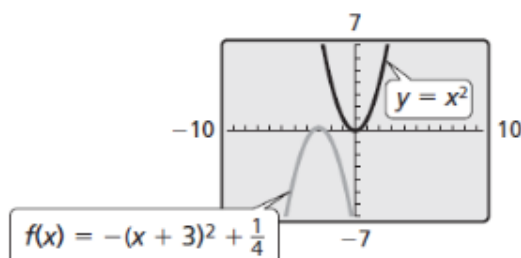
29.

The graph of h is a vertical stretch and a reflection in the x-axis followed by a translation 1 unit down of the parent absolute value function.

31.

The graph of g is a vertical shrink followed by a translation 6 units down of the parent quadratic function.

33.

The graph of f is a reflection in the x-axis followed by a translation 3 units left and $\frac{1}{4}$ unit up of the parent quadratic function.