Integrated Math 3
Unit 3: Representing Functions
3.5 Worksheet
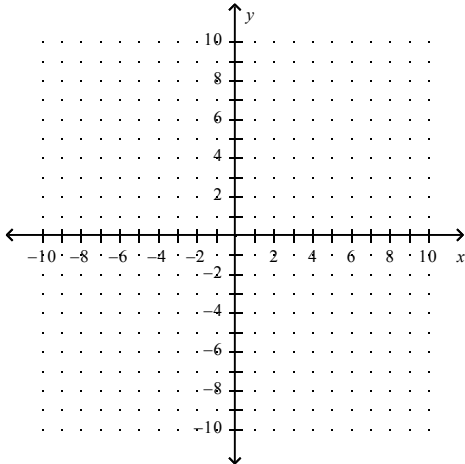
Name: _____

Date:_____ Period:_____

Graphing Absolute Value Functions

1. Graph the following functions and write the equations of the functions

   a. A graph that is shifted four units left, 2 units up, and opens down.
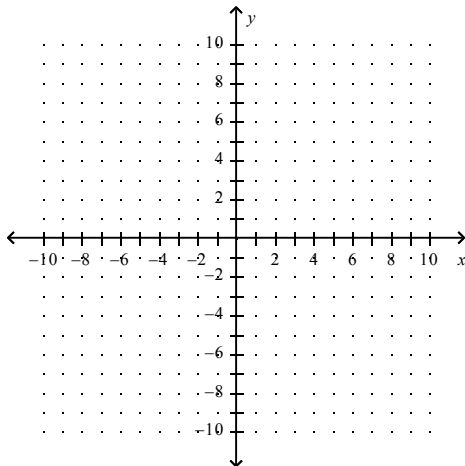

   Vertex:

   Opens:

   Slopes:

   Equation:

   b. A graph that is shifted 3 units right, 4 units up, and has slopes increased to 3.
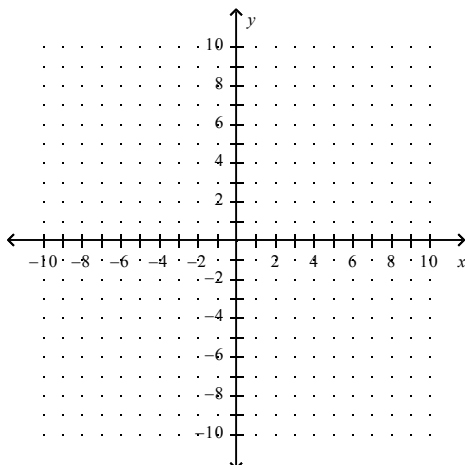

   Vertex:

   Opens:

   Slopes:

   Equation:

   c. A graph that opens down, has slopes that widen the graph by a factor of $\frac{2}{3}$, moves the vertex of the graph left 3 units and down 4 units.
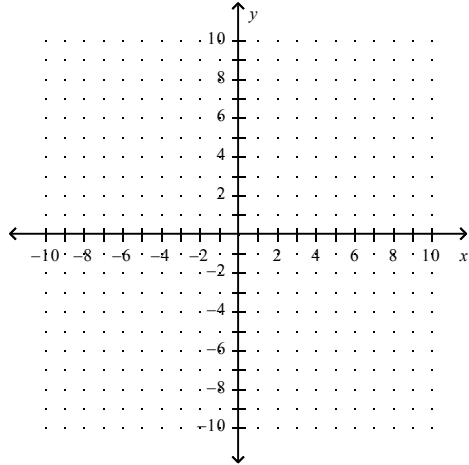

   Vertex:

   Opens:

   Slopes:

   Equation:

d. A graph that is shifted 3 units right, 2 units down, and also has ray that goes through the point $(5, 3)$.
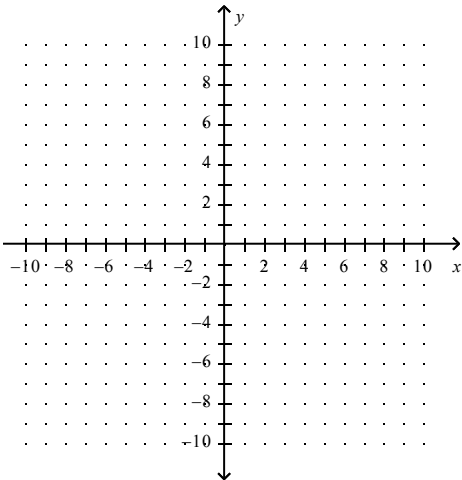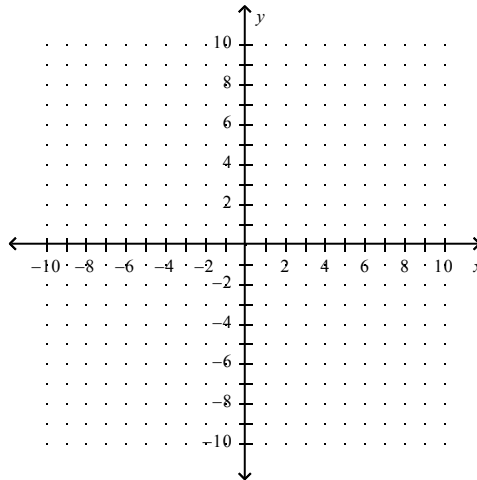
Vertex:

Opens:

Slopes:

Equation:

2. Graph the following functions and write the transformations:
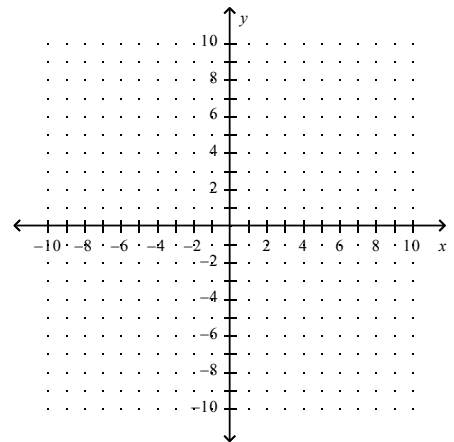
a. $y = -2|x - 4| + 4$

b. $y = 3|x + 1| - 3$

c. $y = \frac{-2}{5}|x - 4| + 6$

Transformations:

Transformations:

Transformation: