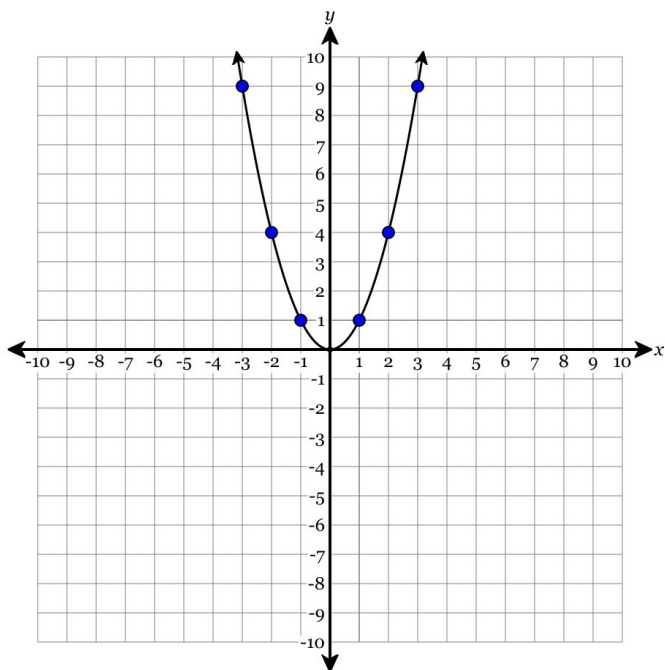


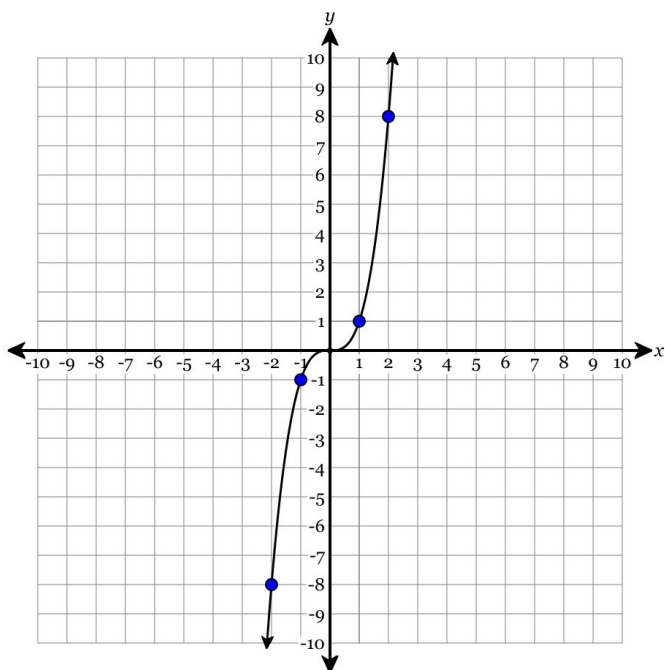
53. Graph the equation shown below by transforming the given graph of the parent function.

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



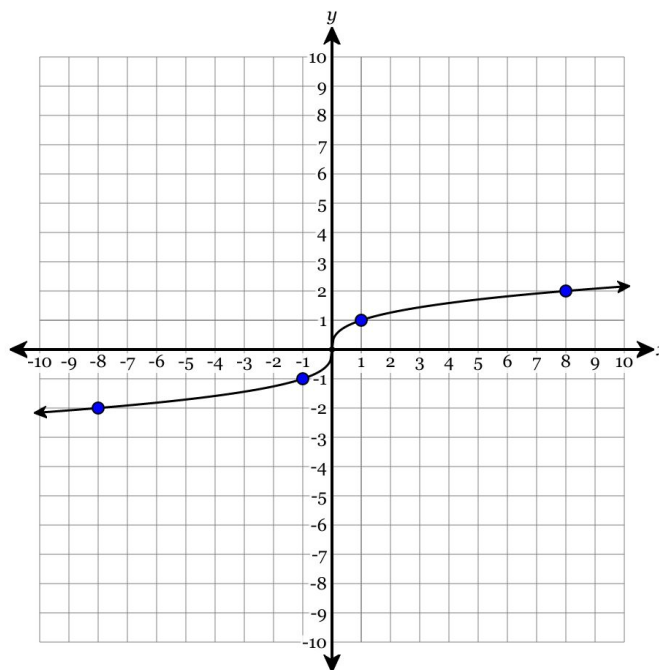
54. Graph the equation shown below by transforming the given graph of the parent function.

$$y = (x + 1)^3 - 2$$



55. Graph the equation shown below by transforming the given graph of the parent function.

$$y = \sqrt[3]{x + 5} + 4$$



56. Find  $g(f(-12)) + 5f(f(16))$  in simplified form.

$x$	$f(x)$	$g(x)$
8	-18	10
-17	-5	14
16	-17	-12
-12	8	-14
17	-7	-8
-8	12	2

57. Find  $f(f(5))$ .

$x$	$f(x)$	$g(x)$
19	16	16
-19	4	20
5	-19	19
2	-12	5
-20	17	-2
-13	2	-20
16	-15	13

58. Find  $f(g(11))$ .

$x$	$f(x)$	$g(x)$
0	9	-7
9	-19	3
14	-5	20
11	-1	-18
-1	17	11
-18	14	-15
-6	16	1
1	-14	12

59. Find  $g(f(-19)) + 5f(g(12))$  in simplified form.

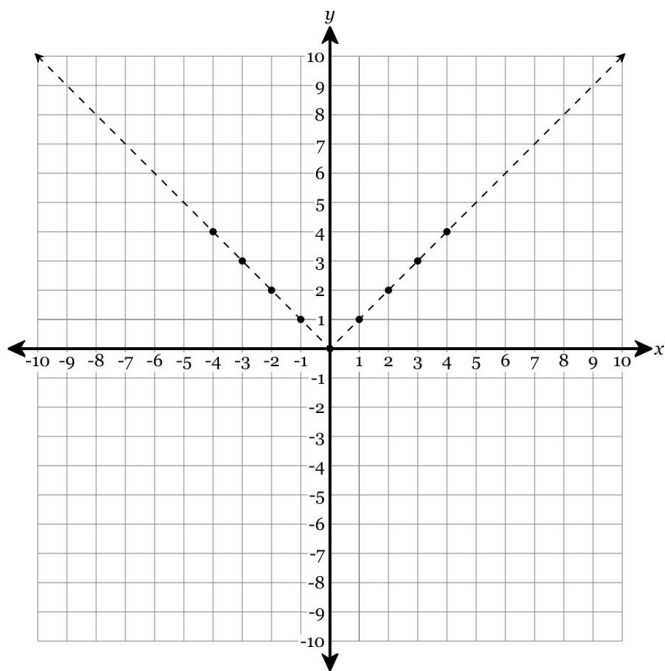
$x$	$f(x)$	$g(x)$
-4	11	13
-19	13	-10
-8	-15	-9
-20	9	-12
12	-19	-4
-1	-8	-19
2	18	12
13	10	-17

60. Find  $g(f(19)) - 5f(g(20))$  in simplified form.

$x$	$f(x)$	$g(x)$
-15	-1	-10
19	10	16
7	11	-2
-4	-16	19
-9	8	11
10	2	13
-16	3	4
20	-6	7

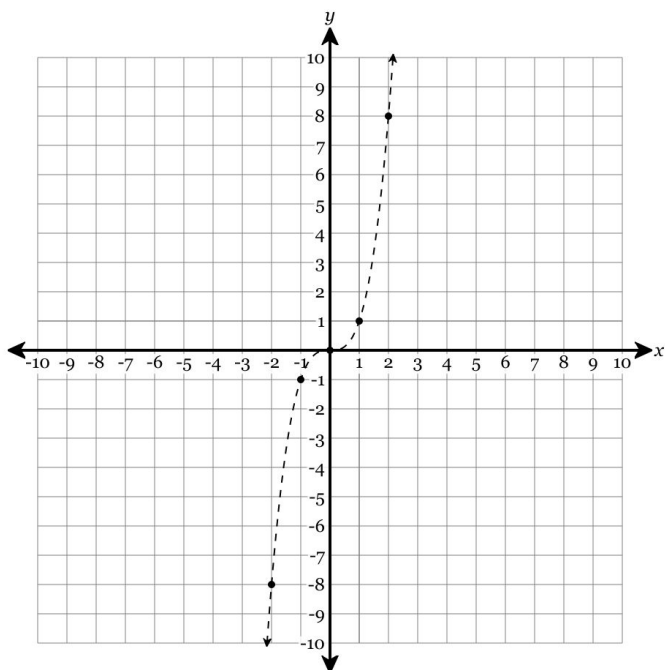
61. Graph the equation shown below by transforming the given graph of the parent function.

$$y = -|-x|$$



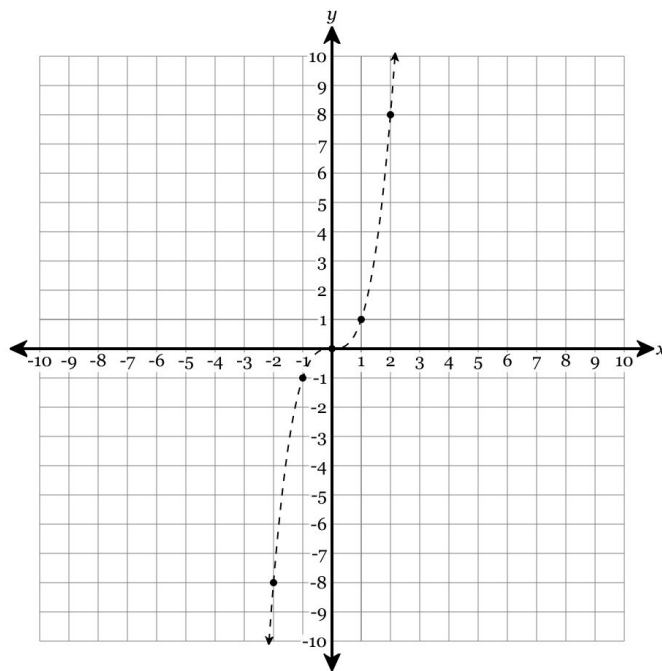
62. Graph the equation shown below by transforming the given graph of the parent function.

$$y = -(-x)^3$$



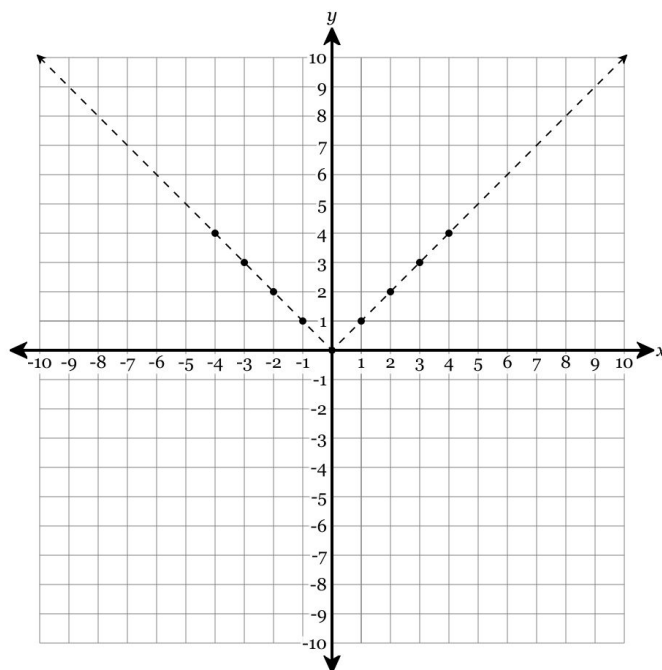
63. Graph the equation shown below by transforming the given graph of the parent function.

$$y = -(-x)^3$$



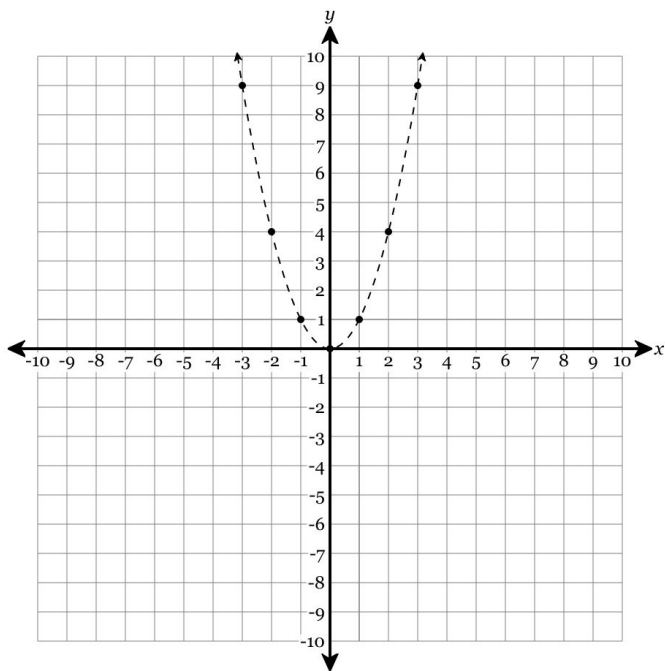
64. Graph the equation shown below by transforming the given graph of the parent function.

$$y = -|x|$$



65. Graph the equation shown below by transforming the given graph of the parent function.

$$y = -x^2$$

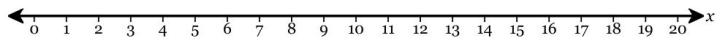


66. Fill in the values below and use them to create a box and whiskers plot for the following set of data.

4, 4, 5, 6, 7, 8, 9, 9, 10, 17

Min: \_\_\_ Q1: \_\_\_ Med: \_\_\_ Q3: \_\_\_ Max: \_\_\_

Create the box plot by dragging the lines:

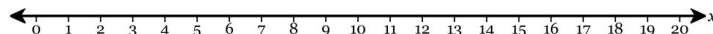


67. Fill in the values below and use them to create a box and whiskers plot for the following set of data.

4, 4, 6, 7, 11, 11, 11, 15, 17

Min: \_\_\_ Q1: \_\_\_ Med: \_\_\_ Q3: \_\_\_ Max: \_\_\_

Create the box plot by dragging the lines:



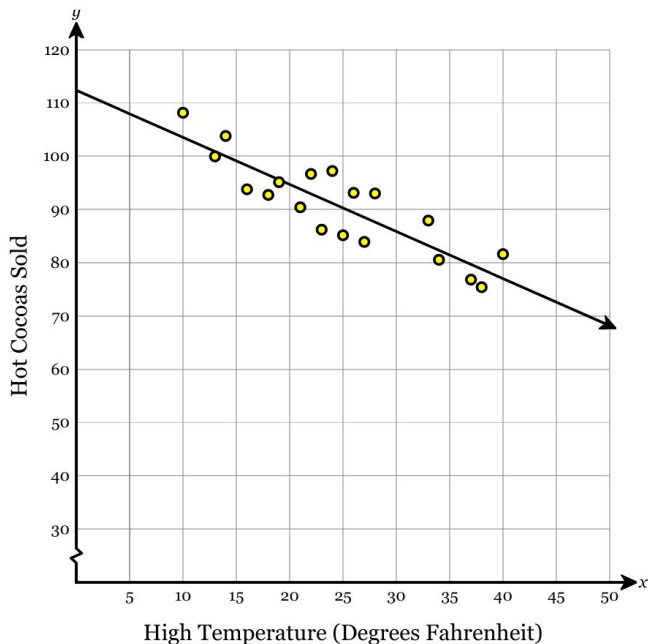
68. Find the median and mean of the data set below:

18, 12, 2, 40

69. Find the median and mean of the data set below:

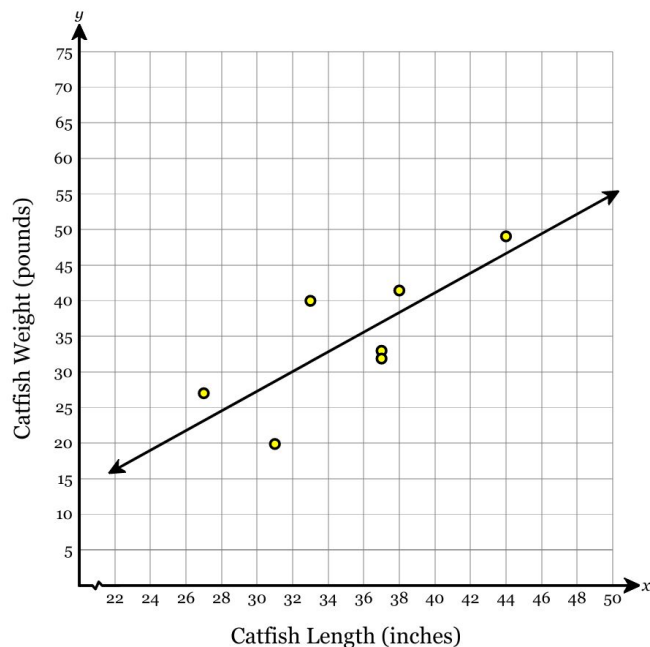
29, 37, 33, 38, 23, 38, 5

70. Jayden has a part-time job at an ice skating rink selling hot cocoa. He decided to plot the number of hot cocoas he sold relative to the day's high temperature and then draw the line of best fit. What does the slope of the line represent?



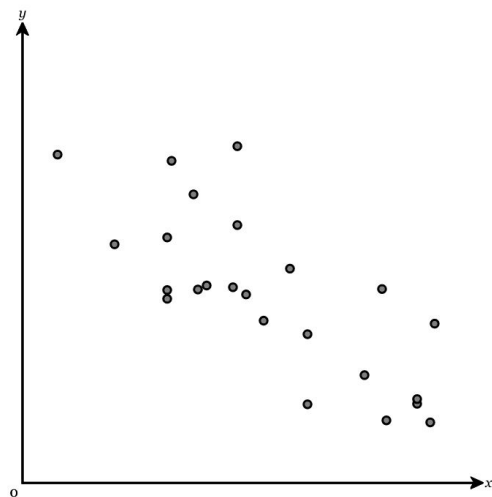
- A. A prediction of the temperature when 1 hot cocoa is sold.
- B. A prediction of number of hot cocoas sold when the temperature is  $1^{\circ}\text{F}$ .
- C. The rate of change in the expected number of hot cocoas over the day's high temperature.
- D. The rate of change in the day's high temperature for every additional hot cocoa sold.

71. Amira decides to research the relationship between the length in inches and the weight of a certain species of catfish. She measures the length and weight of a number of specimens she catches then throws back into the water. After plotting all her data, she draws a line of best fit. What is the meaning of the  $x$ -value on the line when  $y = 9$ ?



- A. Amira caught a catfish that weighed 9 pounds.
- B. Amira caught a catfish 9 inches long.
- C. The expected length of a catfish that weighs 9 pounds.
- D. The expected weight of a catfish that is 9 inches long.

72. Graph the line of best fit.



73. Graph the line of best fit.

