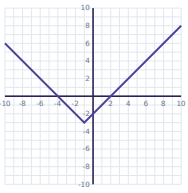
Graphing Absolute Value Functions · 1

What is the vertex of the absolute value graph?



Graphing Absolute Value Functions · 2

Find the vertex of the graph of y = |x + 1| - 7.

Graphing Absolute Value Functions · 3

Does the graph of y = -2|x - 4| - 8 open up or down?

Graphing Absolute Value Functions · 4

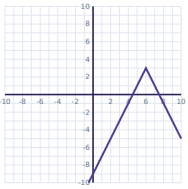
Find the axis of symmetry of the graph of y = -|x - 4| + 1.

Graphing Absolute Value Functions · 5

The graph of y = |x| is shifted 4 units right and 2 units down. Write the equation of the new graph.

Graphing Absolute Value Functions · 6

What is the vertex of the absolute value graph?

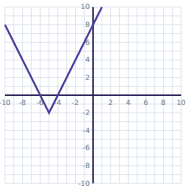


Graphing Absolute Value Functions · 7

Find the vertex of the graph of y = 2|x + 2| + 1.

Graphing Absolute Value Functions · 8

What is the vertex of the absolute value graph?



Graphing Absolute Value Functions · 2

ANSWER

(-1, -7)

Graphing Absolute Value Functions · 1

ANSWER

(-1, -3)

Graphing Absolute Value Functions · 4

ANSWER

x = 4

Graphing Absolute Value Functions · 3

ANSWER

down

Graphing Absolute Value Functions · 6

ANSWER

(6, 3)

Graphing Absolute Value Functions · 5

ANSWER

y = |x - 4| - 2

Graphing Absolute Value Functions · 8

ANSWER

(-5, -2)

Graphing Absolute Value Functions · 7

ANSWER

(-2, 1)

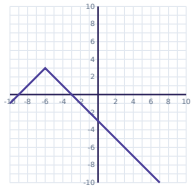
Find the vertex of the graph of y = -2|x + 5| - 7.

Does the graph of y = |x - 2| + 5 open up or down?

Find the axis of symmetry of the graph of y = -|x - 1| + 9.

The graph of y = |x| is shifted 2 units right and 3 units up. Write the equation of the new graph.

What is the vertex of the absolute value graph?



Find the vertex of the graph of y = |x - 4| + 8.

Find the vertex of the graph of y = -4|x - 6| - 7.

What is the slope of the right-hand branch (where x > -1) of the graph of y = |x + 1| + 4?

Graphing Absolute Value Functions · 10

ANSWER

up

Graphing Absolute Value Functions · 9

ANSWER

(-5, -7)

Graphing Absolute Value Functions · 12

ANSWER

y = |x - 2| + 3

Graphing Absolute Value Functions · 11

ANSWER

x = 1

Graphing Absolute Value Functions · 14

ANSWER

(4, 8)

Graphing Absolute Value Functions · 13

ANSWER

(-6, 3)

Graphing Absolute Value Functions · 16

ANSWER

1

Graphing Absolute Value Functions · 15

ANSWER

(6, -7)

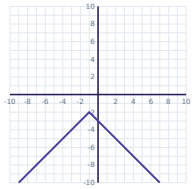
Find the y-intercept of the graph of y = -|x + 6| - 8. Write the y-value only.

Find the maximum value of y = -2|x - 1| + 4.

Find the axis of symmetry of the graph of y = 3|x - 5| + 8.

The graph of y = |x| is reflected across the x-axis and then shifted 4 units right and 2 units up. Write the equation of the new graph.

What is the vertex of the absolute value graph?



Find the vertex of the graph of y = 2|x - 3| - 3.

Does the graph of y = |x + 2| - 6 open up or down?

Find the axis of symmetry of the graph of y = 2|x - 4| + 9.

Graphing Absolute Value Functions · 18

ANSWER

4

Graphing Absolute Value Functions · 17

ANSWER

-14

Graphing Absolute Value Functions · 20

ANSWER

y = -|x - 4| + 2

Graphing Absolute Value Functions · 19

ANSWER

x = 5

Graphing Absolute Value Functions · 22

ANSWER

(3, -3)

Graphing Absolute Value Functions · 21

ANSWER

(-1, -2)

Graphing Absolute Value Functions · 24

ANSWER

x = 4

Graphing Absolute Value Functions · 23

ANSWER

up