Vertex Form & Graphs of Parabolas · 1

Find the vertex of $y = 2(x + 1)^2 + 4$. Write it as (h, k).

Vertex Form & Graphs of Parabolas · 2

Find the axis of symmetry of $y = -(x - 2)^2 + 2$.

Vertex Form & Graphs of Parabolas · 3

What is the maximum value of $y = -2(x - 3)^2 - 1$?

Vertex Form & Graphs of Parabolas · 4

Find the vertex of $y = (x - 3)^2$. Write it as (h, k).

Vertex Form & Graphs of Parabolas · 5

Find the axis of symmetry of $y = -(x + 3)^2 - 2$.

Vertex Form & Graphs of Parabolas · 6

What is the maximum value of $y = -(x + 2)^2 + 4$?

Vertex Form & Graphs of Parabolas · 7

Find the vertex of $y = (x - 2)^2 - 3$. Write it as (h, k).

Vertex Form & Graphs of Parabolas · 8

Find the axis of symmetry of $y = -2(x - 2)^2 - 1$.

Vertex Form & Graphs of Parabolas · 2

ANSWER

x = 2

Vertex Form & Graphs of Parabolas · 1

ANSWER

(-1, 4)

Vertex Form & Graphs of Parabolas · 4

ANSWER

(3, 0)

Vertex Form & Graphs of Parabolas · 3

ANSWER

-1

Vertex Form & Graphs of Parabolas · 6

ANSWER

4

Vertex Form & Graphs of Parabolas · 5

ANSWER

x = -3

Vertex Form & Graphs of Parabolas · 8

ANSWER

x = 2

Vertex Form & Graphs of Parabolas · 7

ANSWER

(2, -3)

What is the minimum value of $y = (x - 1)^2 - 3$?

Find the vertex of $y = -2(x + 4)^2 - 1$. Write it as (h, k).

Find the axis of symmetry of $y = (x - 5)^2 - 4$.

What is the minimum value of $y = 3(x + 4)^2 - 4$?

Find the vertex of $y = -2(x - 5)^2 - 4$. Write it as (h, k).

What is the minimum value of $y = 3(x - 4)^2 - 6$?

Write in vertex form by completing the square: $y = x^2 + 2x - 2$

Write in vertex form by completing the square: $y = x^2 + 8x + 10$

Vertex Form & Graphs of Parabolas · 10

ANSWER

(-4, -1)

Vertex Form & Graphs of Parabolas · 9

ANSWER

-3

Vertex Form & Graphs of Parabolas · 12

ANSWER

-4

Vertex Form & Graphs of Parabolas · 11

ANSWER

x = 5

Vertex Form & Graphs of Parabolas · 14

ANSWER

-6

Vertex Form & Graphs of Parabolas · 13

ANSWER

(5, -4)

Vertex Form & Graphs of Parabolas · 16

ANSWER

$y = (x + 4)^2 - 6$

Vertex Form & Graphs of Parabolas · 15

ANSWER

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

Find the axis of symmetry of $y = -(x - 3)^2 + 3$.

Find the vertex of $y = 2(x + 1)^2 + 2$. Write it as (h, k).

Find the axis of symmetry of $y = -(x + 1)^2 - 3$.

What is the maximum value of $y = -(x + 2)^2 - 4$?

Find the vertex of $y = -2(x + 2)^2 + 4$. Write it as (h, k).

Find the axis of symmetry of $y = -(x - 2)^2 + 3$.

What is the minimum value of $y = (x + 1)^2 - 4$?

Find the vertex of $y = 2x^2 + 5$. Write it as (h, k).

Vertex Form & Graphs of Parabolas · 18

ANSWER

(-1, 2)

Vertex Form & Graphs of Parabolas · 17

ANSWER

x = 3

Vertex Form & Graphs of Parabolas · 20

ANSWER

-4

Vertex Form & Graphs of Parabolas · 19

ANSWER

x = -1

Vertex Form & Graphs of Parabolas · 22

ANSWER

x = 2

Vertex Form & Graphs of Parabolas · 21

ANSWER

(-2, 4)

Vertex Form & Graphs of Parabolas · 24

ANSWER

(0, 5)

Vertex Form & Graphs of Parabolas · 23

ANSWER

-4