Task card 1 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = x^2 + 4x + 12$

Task card 2 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 3x^2 - 6x + 2$

Task card 3 Vertex Form & Graphs of Parabolas

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

Task card 4 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 3x^2 - 6x - 3$

Task card 5 Vertex Form & Graphs of Parabolas

Find the vertex of $y = -3(x + 8)^2 - 4$. Write it as (h, k).

Task card 6 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = x^2 + 2x + 4$

Task card 7 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = -3x^2 + 30x - 81$

Task card 8 Vertex Form & Graphs of Parabolas

What is the minimum value of $y = 4x^2 + 24x + 29$?

Task card 9 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 3x^2 + 48x + 189$

Task card 10 Vertex Form & Graphs of Parabolas

Find the vertex of $y = 3(x + 3)^2 + 6$. Write it as (h, k).

Task card 11 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = x^2 - 14x + 41$

Task card 12 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = -3x^2 - 6x + 3$

Task card 13 Vertex Form & Graphs of Parabolas

What is the maximum value of $y = -x^2 + 4x - 12$?

Task card 14 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 3x^2 + 48x + 195$

Task card 15 Vertex Form & Graphs of Parabolas

Find the vertex of $y = 2(x + 4)^2 - 3$. Write it as (h, k).

Task card 16 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = x^2 + 16x + 60$

Task card 17 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 2x^2 + 20x + 58$

Task card 18 Vertex Form & Graphs of Parabolas

What is the minimum value of $y = 4x^2 + 7$?

Task card 19 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 3x^2 + 12x + 6$

Task card 20 Vertex Form & Graphs of Parabolas

Find the vertex of $y = 2(x + 6)^2 + 8$. Write it as (h, k).

Task card 21 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = x^2 + 4x + 7$

Task card 22 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = -2x^2 + 16x - 30$

Task card 23 Vertex Form & Graphs of Parabolas

What is the minimum value of $y = 4(x - 5)^2 - 3$?

Task card 24 Vertex Form & Graphs of Parabolas

Write in vertex form by completing the square: $y = 2x^2 - 20x + 52$

Vertex Form & Graphs of Parabolas Task Cards

Recording sheet · Grade 11 · Answer each question about the parabola. To graph one, click its vertex and two more points on the grid.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Vertex Form & Graphs of Parabolas Task Cards: Answer Key

Grade 11 · Hard

The answers online

1. $y = (x + 2)^2 + 8$	**2.** $y = 3(x - 1)^2 - 1$	**3.** 4
4. $y = 3(x - 1)^2 - 6$	**5.** (-8, -4)	**6.** $y = (x + 1)^2 + 3$
7. $y = -3(x - 5)^2 - 6$	**8.** -7	**9.** $y = 3(x + 8)^2 - 3$
10. (-3, 6)	**11.** $y = (x - 7)^2 - 8$	**12.** $y = -3(x + 1)^2 + 6$
13. -8	**14.** $y = 3(x + 8)^2 + 3$	**15.** (-4, -3)
16. $y = (x + 8)^2 - 4$	**17.** $y = 2(x + 5)^2 + 8$	**18.** 7
19. $y = 3(x + 2)^2 - 6$	**20.** (-6, 8)	**21.** $y = (x + 2)^2 + 3$
22. $y = -2(x - 4)^2 + 2$	**23.** -3	**24.** $y = 2(x - 5)^2 + 2$