

Writing Quadratic Equations from a Graph (Part 1) Answers

1. Standard	$f(x) = -x^2 + 1,$	Vertex	$f(x) = -(x)^2 + 1,$	Factored	$f(x) = -(x + 1)(x - 1)$
2. Standard	$f(x) = x^2 - 2x - 3,$	Vertex	$f(x) = (x - 1)^2 - 4,$	Factored	$f(x) = (x + 1)(x - 3)$
3. Standard	$f(x) = -x^2 - 2x + 3,$	Vertex	$f(x) = -(x + 1)^2 + 4,$	Factored	$f(x) = -(x + 3)(x - 1)$
4. Standard	$f(x) = -2x^2 + 4x - 2,$	Vertex	$f(x) = -2(x - 1)^2,$	Factored	$f(x) = -2(x - 1)(x - 1)$
5. Standard	$f(x) = x^2 - 9,$	Vertex	$f(x) = (x)^2 - 9,$	Factored	$f(x) = (x + 3)(x - 3)$
6. Standard	$f(x) = x^2,$	Vertex	$f(x) = (x)^2,$	Factored	$f(x) = x(x)$
7. Standard	$f(x) = -3x^2 + 6x,$	Vertex	$f(x) = -3(x - 1)^2 + 3,$	Factored	$f(x) = -3x(x - 2)$
8. Standard	$f(x) = x^2 + 2x - 3,$	Vertex	$f(x) = (x + 1)^2 - 4,$	Factored	$f(x) = (x + 3)(x - 1)$
9. Standard	$f(x) = -x^2 + 4,$	Vertex	$f(x) = -(x)^2 + 4,$	Factored	$f(x) = -(x + 2)(x - 2)$

Writing Quadratic Equations from a Graph (Part 2) Answers

1. Standard	$f(x) = 3x^2 - 12x + 9,$	Vertex	$f(x) = 3(x - 2)^2 - 3,$	Factored	$f(x) = 3(x - 1)(x - 3)$
2. Standard	$f(x) = -3x^2 - 12x,$	Vertex	$f(x) = -3(x + 2)^2 + 12,$	Factored	$f(x) = -3x(x + 4)$
3. Standard	$f(x) = -x^2 + 2x + 8,$	Vertex	$f(x) = -(x - 1)^2 + 9,$	Factored	$f(x) = -(x + 2)(x - 4)$
4. Standard	$f(x) = x^2 - 2x - 8,$	Vertex	$f(x) = (x - 1)^2 - 9,$	Factored	$f(x) = (x + 2)(x - 4)$
5. Standard	$f(x) = x^2 - 4,$	Vertex	$f(x) = (x)^2 - 4,$	Factored	$f(x) = (x - 2)(x + 2)$
6. Standard	$f(x) = -x^2,$	Vertex	$f(x) = -(x)^2,$	Factored	$f(x) = -x(x)$
7. Standard	$f(x) = -x^2 + 2x + 3,$	Vertex	$f(x) = -(x - 1)^2 + 4,$	Factored	$f(x) = -(x + 1)(x - 3)$
8. Standard	$f(x) = x^2 - 1,$	Vertex	$f(x) = (x)^2 - 1,$	Factored	$f(x) = (x + 1)(x - 1)$
9. Standard	$f(x) = 2x^2 + 4x + 2,$	Vertex	$f(x) = 2(x + 1)^2,$	Factored	$f(x) = 2(x + 1)(x + 1)$
10. Standard	$f(x) = 3x^2 + 6x + 3,$	Vertex	$f(x) = 3(x + 1)^2,$	Factored	$f(x) = 3(x + 1)(x + 1)$
11. Standard	$f(x) = -2x^2 + 8x - 6,$	Vertex	$f(x) = -2(x - 2)^2 - 6,$	Factored	$f(x) = -2(x - 1)(x - 3)$
12. Standard	$f(x) = -5x^2 + 10x - 5,$	Vertex	$f(x) = -5(x - 1)^2,$	Factored	$f(x) = -5(x - 1)(x - 1)$
13. Standard	$f(x) = -2x^2 + 18,$	Vertex	$f(x) = -2(x)^2 + 18,$	Factored	$f(x) = -2(x + 3)(x - 3)$
14. Standard	$f(x) = -x^2 + 4x + 5,$	Vertex	$f(x) = -(x - 2)^2 + 9,$	Factored	$f(x) = -(x + 1)(x - 5)$

Writing Quadratic Equations from a Graph (Part 1) Answers

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9. Standard	$f(x) = -x^2 + 4,$	Vertex	$f(x) = -(x)^2 + 4,$	Factored	$f(x) = -(x + 2)(x - 2)$

Writing Quadratic Equations from a Graph (Part 2) Answers

1. Standard	$f(x) = 3x^2 - 12x + 9,$	Vertex	$f(x) = 3(x - 2)^2 - 3,$	Factored	$f(x) = 3(x - 1)(x - 3)$
2. Standard	$f(x) = -3x^2 - 12x,$	Vertex	$f(x) = -3(x + 2)^2 + 12,$	Factored	$f(x) = -3x(x + 4)$
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