

Review Worksheet for Unit 3C Quiz

Name _____ Date _____

What is the Standard Form of a Quadratic Function?

What is the Vertex Form of a Quadratic Function?

What is the Intercept Form of a Quadratic Function?

I. State the vertex and give the direction the parabola opens?

1. $y = -4(x - 2)^2 + 3$

2. $f(x) = 7x^2 + 14x + 4$

3. $h(x) = -(x + 3)(x - 7)$

4. $y = 2(x + 6)^2 - 8$

II. Describe all of the transformations compared to the parent graph ($y = x^2$) for each equation.

5. $g(x) = \frac{1}{5}x^2 - 6$

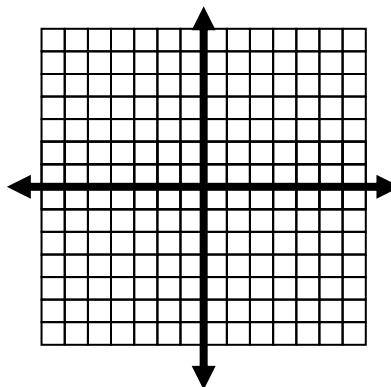
6. $y = -4(x + 2)^2$

7. $f(x) = (x - 4)^2 + 1$

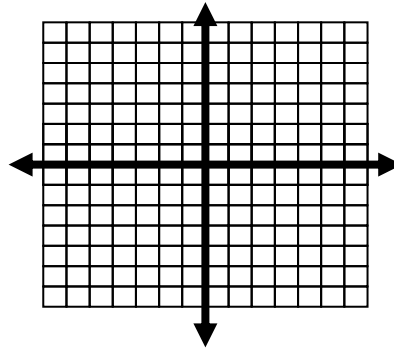
8. $y = -\frac{3}{2}x^2$

III. Find the vertex and AOS. Use a table of values to graph each quadratic function.

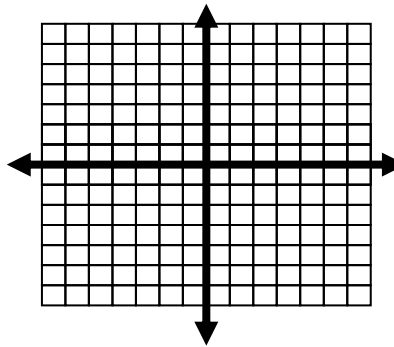
9. $y = 2(x - 3)^2 - 4$



10. $f(x) = -x^2 - 4x - 1$



11. $y = (x + 4)(x + 2)$



IV. Rewrite each equation in Standard Form.

12. $y = -4(x + 1)^2 + 5$

13. $f(x) = 3(x - 2)^2 - 7$

14. $f(x) = 3(x - 2)^2 - 7$

15. $y = (3x + 2)(4x - 3)$

V. Rewrite each equation in Vertex Form.

16. $g(x) = x^2 - 10x + 5$

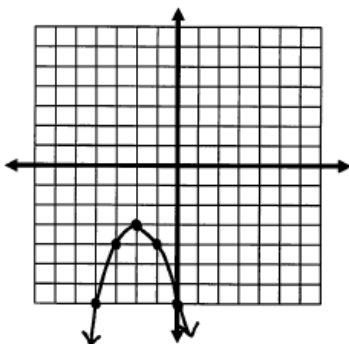
17. $y = 2x^2 - 12x + 3$

18. $y = -x^2 + 10x - 4$

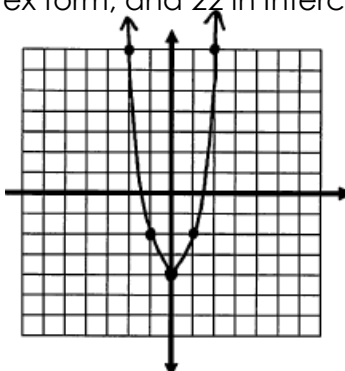
19. $f(x) = 3x^2 + 12x - 7$

VI. Write the equation of 20 & 21 in vertex form, and 22 in Intercept form.

20.



21.



22.

