

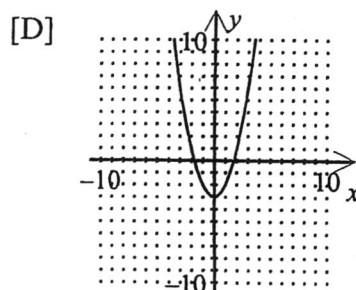
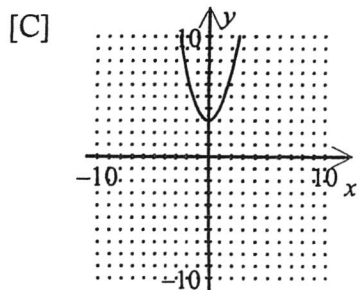
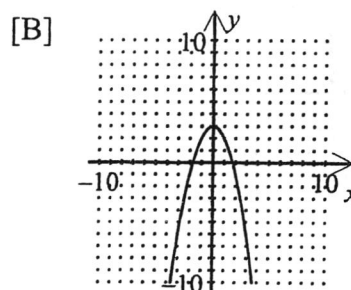
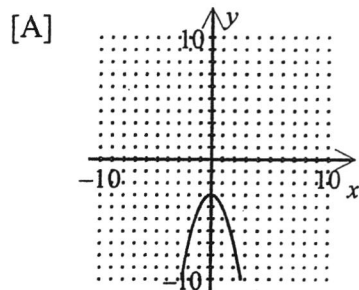
Quiz sections 5.1---5.2

Algebra 2 honors

FORM B

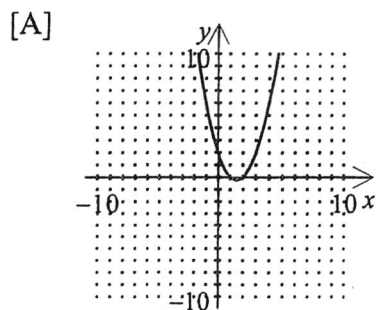
name _____

1. Graph: $y = x^2 - 3$

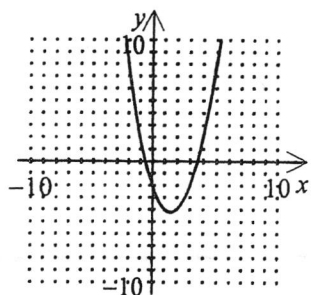


2. Graph the quadratic function. Label the vertex and axis of symmetry.
 $y = -3x^2 + 4x + 5$

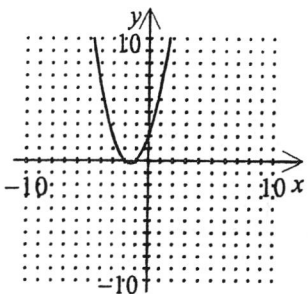
3. Graph: $y = x^2 - 3x - 2$



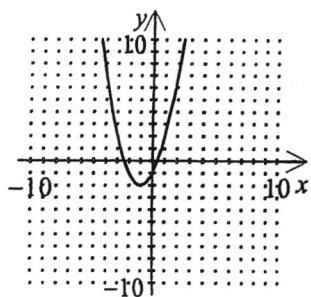
[B]



[C]



[D]



(3.)

4. Does the parabola open *up* or *down*? $y = 4 + 6x + 2x^2$

5. Find the *vertex* and the *axis of symmetry* of the parabola. $y = 2x^2 + 12x - 7$

6. Write in standard form and graph: $y = -(x+1)^2 - 1$

7. Graph the function. Label the vertex, axis of symmetry, and *x*-intercepts.
 $y = -4(x-5)(x-7)$

Factor the expression:

8. $x^2 + 14x + 49$

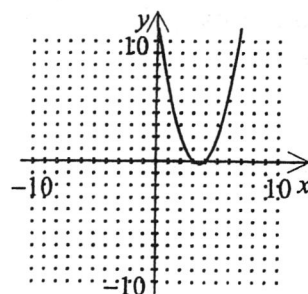
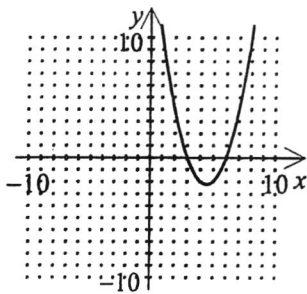
9. $15x^2 + 3 + 14x$

10. Solve by factoring: $x^2 + 18x - 81 = 0$

11. Find the x -intercepts of the graph of $y = x^2 - 9x + 18$.

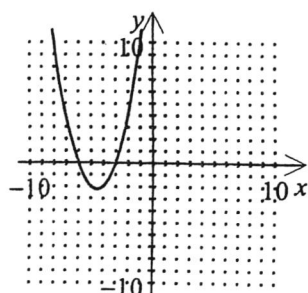
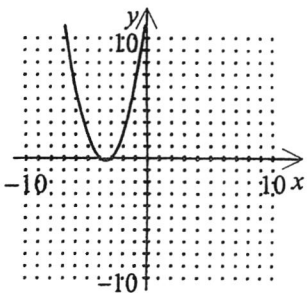
[A] 3, 6

[B] 4, 3



[C] -4, -3

[D] -3, -6



Find the zeros of the equation.

12. $x^2 - 2x - 8 = y$

Find the zeros of the equation.

13. $3x^2 + 11x = 20 + y$

[A] $x = -5$ and $x = \frac{3}{4}$

[B] $x = -5$ and $x = \frac{4}{3}$

[C] $x = 5$ and $x = -\frac{4}{3}$

[D] $x = 5$ and $x = -\frac{3}{4}$

14. The height of a triangle is ~~Four~~ feet longer than the base. The area of the triangle is **96** square feet. Find the height and base of the triangle.

15. What are the solutions to the equation?

$$x^2 + 6x - 27 = 0$$

[A] $x = 9$ or $x = -3$

[B] $x = 1$ or $x = -27$

[C] $x = 27$ or $x = -1$

[D] $x = 3$ or $x = -9$