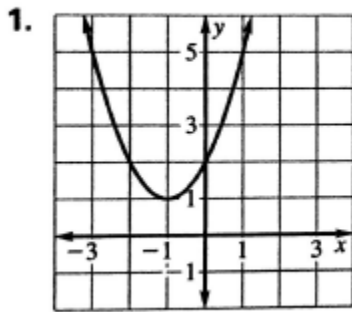


Section 9.7 Worksheet

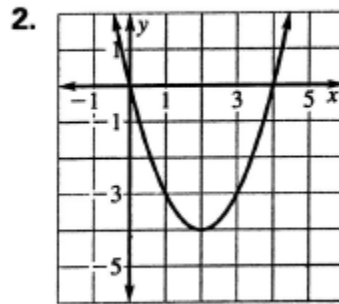
Name: _____

Match the discriminant with the graph.

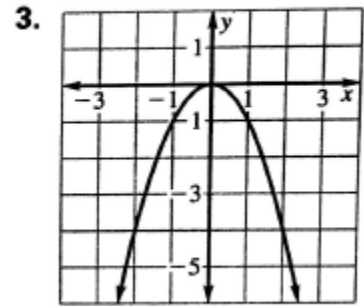
A. $b^2 - 4ac = 3$



B. $b^2 - 4ac = 0$



C. $b^2 - 4ac = -2$



Find the value of the discriminant. Then use the value to determine whether the equation has *two solutions*, *one solution*, or *no real solution*.

4.) $x^2 + 6x + 10 = 0$

5.) $x^2 + 8x = -16$

6.) $15x^2 + 2x + 16 = 0$

7.) $-x^2 + 16x + 64 = 0$

8.) $-3x^2 - 2x = -7$

9.) $9x^2 - 6x + 1 = 0$

REVIEW:

Simplify the expression as much as possible.

10.) $\sqrt{75}$

11.) $\sqrt{\frac{9}{16}}$

12.) $\sqrt{\frac{6}{27}}$

Graph the function by completing the table. Identify the graph's axis of symmetry (AOS), vertex, y-intercept, and tell whether the graph opens up or down.

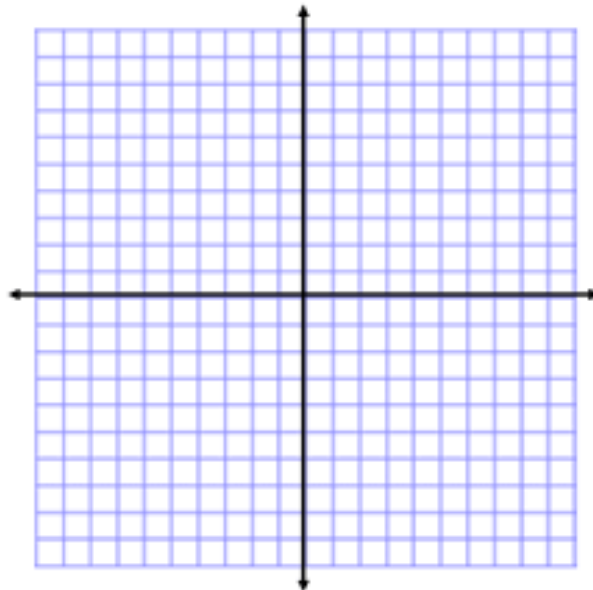
13.) $y = x^2 + x - 4$

AOS: _____

vertex: _____

y-int: _____

opens: _____



x					
y					

Write down the quadratic formula!

14.) _____