

# Quadratics - Warm Up #9 - Binomial Expansion, Discriminant, Graphing

Expand completely.

1)  $(5y + 1)^2$

2)  $(n - m)^2$

3)  $(7x - 1)^2$

4)  $(y - 9)^2$

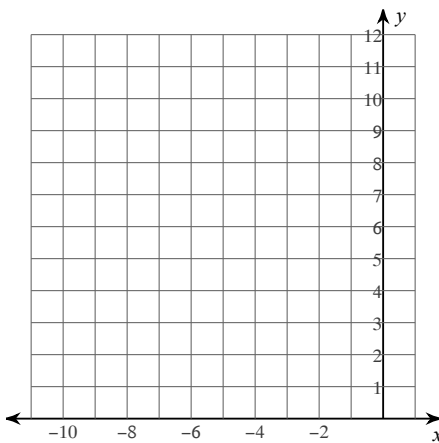
Find the discriminant of each quadratic equation then state the number and type of solutions.

5)  $-x^2 + 2x + 3 = 0$

6)  $-2m^2 - 4m - 10 = 0$

Sketch the graph of each function.

7)  $y = 2(x + 1)^2 + 3$



8)  $y = -2(x - 2)^2 + 3$

