

## Practice

**Solving Quadratic Equations by Graphing**

Identify the quadratic term, the linear term, and the constant term in each function.

1.  $f(x) = x^2 + 14x + 49$

2.  $f(x) = 54x^2 + 36x + 10$

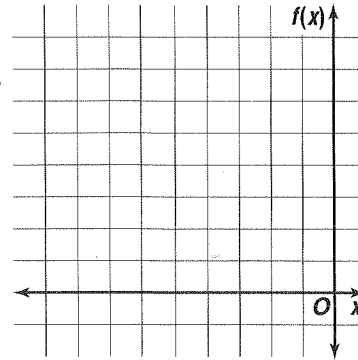
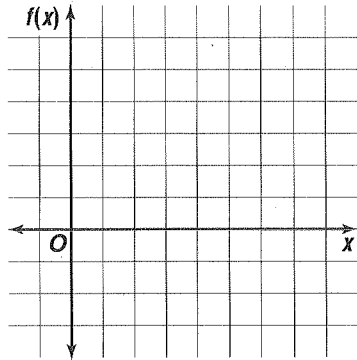
3.  $f(x) = -3(2x + 1)^2$

4.  $f(x) = -\frac{2}{3}(x - 6)^2 + 4$

Graph each function. Name the vertex and the axis of symmetry.

5.  $f(x) = x^2 - 10x + 25$

6.  $f(x) = x^2 + 12x + 36$



Solve each equation by graphing.

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

8.  $x^2 + 2x = 0$

