

## Vertex Form (#43)

Put each quadratic in vertex form and write the vertex of the parabola.

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

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

3.  $f(x) = x^2 - 3x + 1.25$

4.  $f(x) = 2x^2 + 6x + 4$

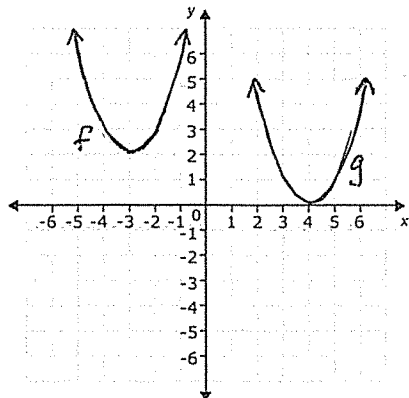
5.  $f(x) = -x^2 + x - 3$

6.  $f(x) = -3x^2 + 5x + 6$

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

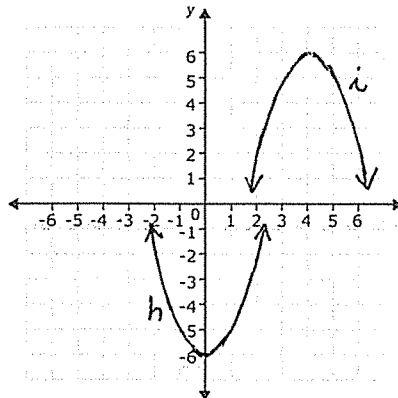
8.  $f(x) = -x^2 + 5x + 6$

9. Write the vertex form of each of the parabolas.



$f(x) =$

$g(x) =$

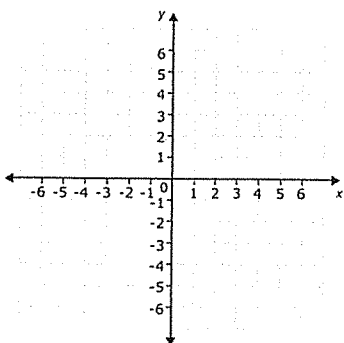


$h(x) =$

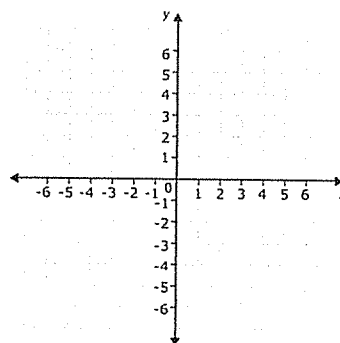
$i(x) =$

Make a rough sketch of each parabola by finding its vertex.

10.  $f(x) = x^2 + 6x + 7$

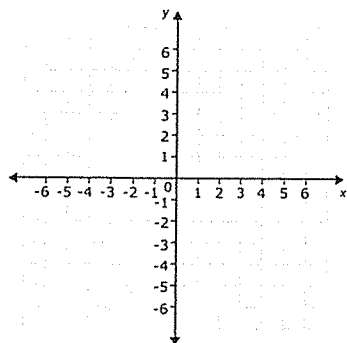


11.  $f(x) = -x^2 + 3x$



Graph each parabola by first finding its x-intercepts, then its vertex.

12.  $f(x) = x^2 - 4x + 3$



13.  $f(x) = -x^2 - 6x - 8$

