

## Changing Forms of Quadratics

Convert each function to standard form. Give the vertex and y-intercept. Graph. Check your work on the calc.

15)  $y = (x + 4)^2 - 5$

16)  $f(x) = (x - 2)^2 + 3$

17)  $y = (x - 1)^2 + 4$

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

Convert each function to factored form. Give the x and y intercepts. Graph. Show the line of symmetry.

19)  $y = x^2 - 4x - 5$

20)  $y = x^2 + 6x$

21)  $f(x) = x^2 + 2x - 8$

22)  $y = x^2 - 6x - 7$

Convert each function to standard form. Give the x and y intercepts. Graph. Show the line of symmetry.

23)  $f(x) = (x + 2)(x - 3)$

24)  $f(x) = (x - 4)(x - 2)$

25)  $y = (x + 5)(x - 1)$

26)  $f(x) = (x + 3)(x + 4)$

Convert each function to vertex form. Give the vertex and y intercept. Graph. Check your work on the calc.

35)  $y = x^2 + 6x + 8$

36)  $y = x^2 + 10x + 21$

37)  $y = x^2 + 2z$

38)  $f(x) = x^2 + 8x + 7$