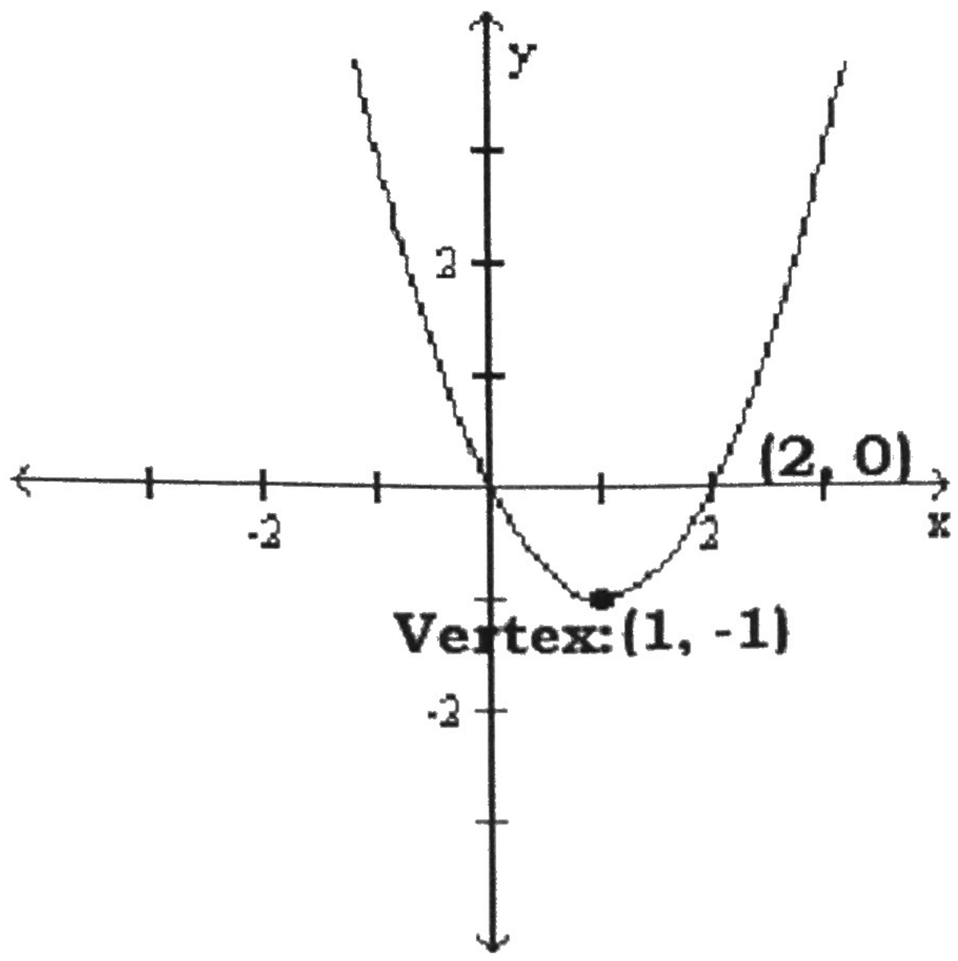
Determine the equation of the graph below:



$f(x) = a(x-h)^2 + k$

$0 = a(2-1)^2 - 1$

$0 = 1a - 1$

$a = 1$

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

$x^2 - 2x + 1 - 1$

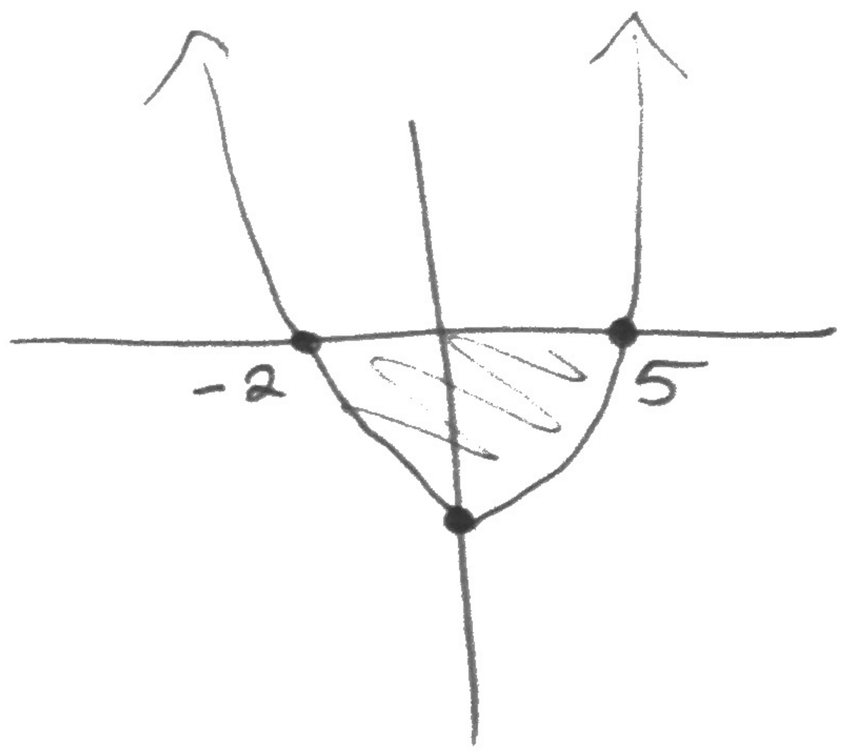
$\boxed{x^2 - 2x}$

Solve the following inequalities:

$x^2 - 3x - 10 \leq 0$

$(x-5)(x+2) = 0$

$x = 5, -2$

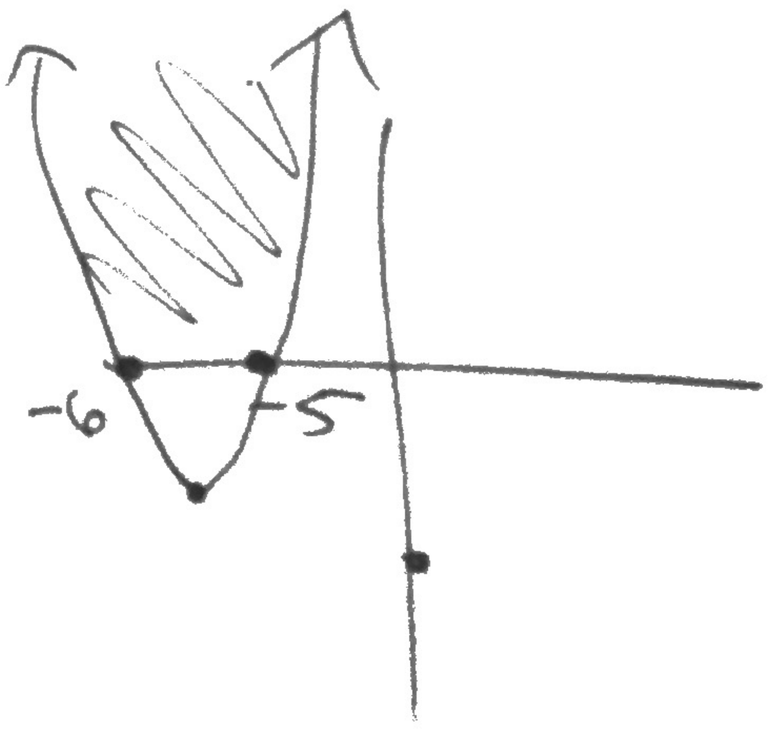


$\boxed{x \geq -2 \quad x \leq 5}$

$x^2 - 11x + 30 > 0$

$(x-6)(x-5) = 0$

$x = 6, 5$



$\boxed{x < -6 \quad x > -5}$