



Quadratics

Vertex coordinates from vertex form:

$x_{\text{vertex}} =$ the value that makes $(x-h) = 0$ So $x=h$

$y_{\text{vertex}} = f(x_{\text{vertex}})$

ex: $f(x) = \underline{-3.2\cancel{7}} (x + \cancel{7})^2 + 5$

negative so
the vertex is
the maximum

x_{vertex} is the value that makes $(x + \cancel{7}) = 0$

so $x = -\cancel{7}$

$$y_{\text{vertex}} = f(-\cancel{7}) = 5$$

Vertex $(-\cancel{7}, 5)$

Intercepts

y-intercept

$$x = 0$$

x-intercept(s)

$$y = 0$$

three possibilities

