

Determine y-intercept of a parabola with vertex at  $(-1, 32)$  and x-intercept at  $x = 3$

Vertex Form:  $y = a(x - p)^2 + q$

$$f(x) = a(x + 1)^2 + 32$$

$$0 = a(3 + 1)^2 + 32$$

$$-32 = 16a$$

$$-2 = a$$

