

Features of Quadratics

Name: Key

Domain: all x-values, for quadratics always $(-\infty, \infty)$

Range: all y-values depends on vertex

y-intercepts: where we cross the y-axis, where $x=0$!

- We can look for this in our table easily, or just plug in 0 for x!

Let's Practice! Find the y-intercept!

1. $2(x-5)^2 - 4$

$(0, 46)$

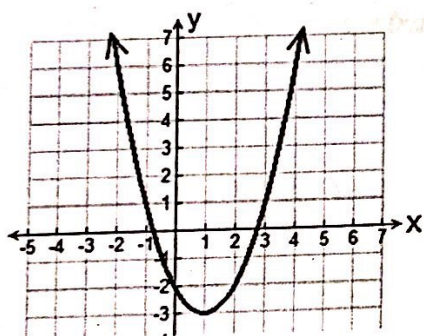
2. $.5x^2 - 4x - 15$

$(0, -15)$

3. $(x+3)^2 + 8$

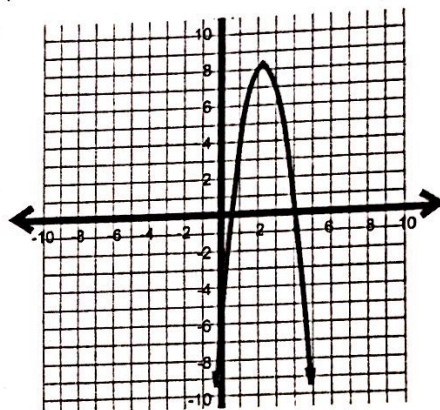
$(0, 17)$

Let's Practice Finding Domain and Range!



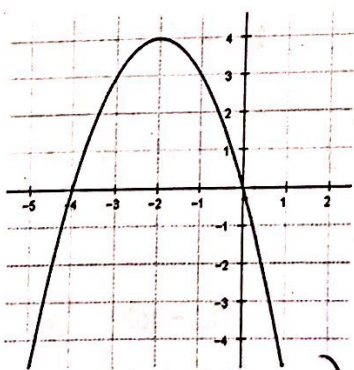
Domain: $(-\infty, \infty)$

Range: $[-3, \infty)$



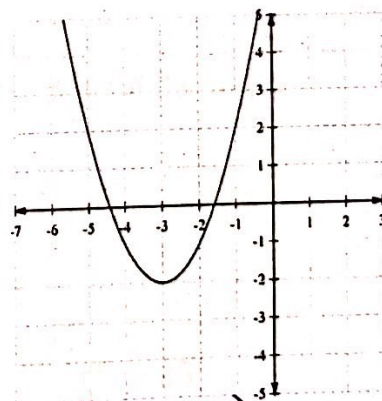
Domain: $(-\infty, \infty)$

Range: $(-\infty, 8]$



Domain: $(-\infty, \infty)$

Range: $(-\infty, 4]$



Domain: $(-\infty, \infty)$

Range: $[-2, \infty)$