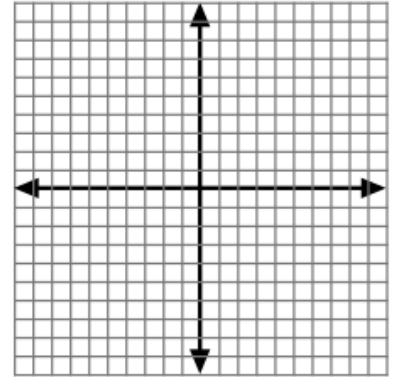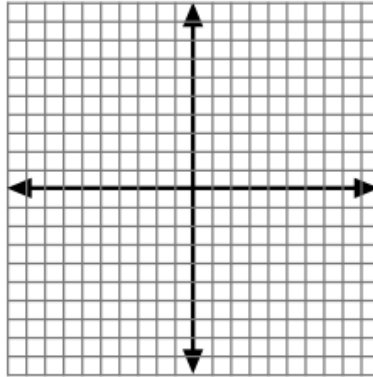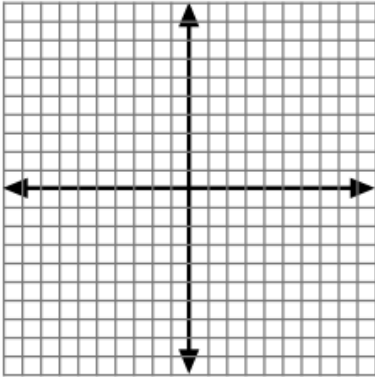I can find the x-intercepts of quadratic functions.

Graph the following linear functions.

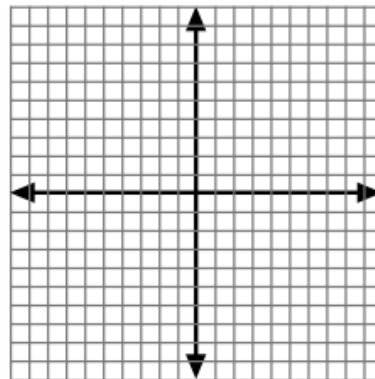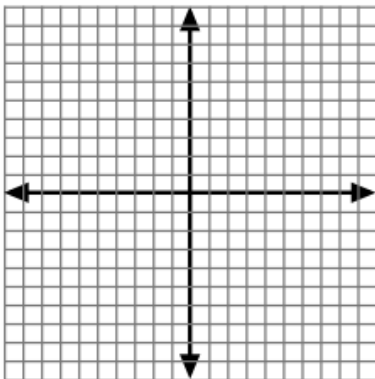| 1. y = x + 4	2. y = 2x – 6	3. y = ½x + 4

For each function, where does the <u>x-intercept</u> occur?   Is there a way to find the x-intercepts without graphing?

 Consider a quadratic function. Sketch the graph and identify the x-intercepts.

1. $y = x^2 – 2x – 8$	2. $y = x^2 + 2x – 3$

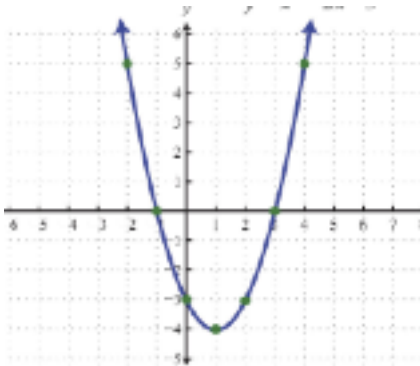Is there a strategy we can use to find the x-intercepts without graphing?

I can find the x-intercepts of quadratic functions.
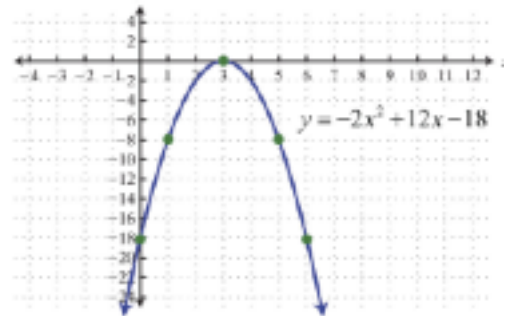
• **x-intercepts** are also called _____ , or _____ .

Zero Product Property

Find the zeros of each function.

1.

2.

$y = -2x^2 + 12x - 18$

3. $f(x) = (x - 2)(x - 7)$

4. $g(x) = (3x + 4)(x - 5)$

5. $j(x) = x^2 + 5x - 24$

6. $h(x) = x^2 + 13x + 40$