

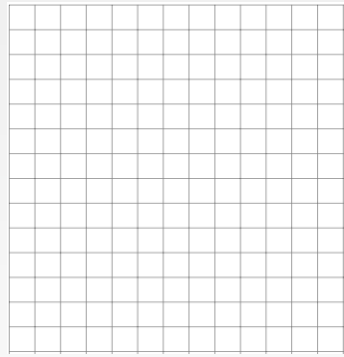
## GRAPHING

Use

Eq: \_\_\_\_\_

$x \approx$  \_\_\_\_\_

What are the steps you used?

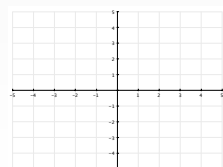
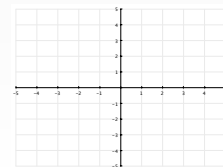
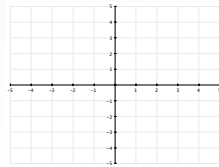


# of real solutions:

2

1

0



## FACTORING

$a = 1$

$a \neq 1$

Eq: \_\_\_\_\_

Eq: \_\_\_\_\_

GCF

Eq: \_\_\_\_\_

$x =$  \_\_\_\_\_

$x =$  \_\_\_\_\_

$x =$  \_\_\_\_\_

Use

Suppose you throw a baseball into the air with an initial upward velocity of 29 ft/s and an initial height of 6 ft. The formula  $h = -16t^2 + 29t + 6$  gives the ball's height  $h$  in feet at time  $t$  in seconds. What is the maximum height the ball reaches? How long will the ball be in the air before it hits the ground? Show all work.

Best used when  $b =$  \_\_\_\_\_

## SQUARE ROOT

Eq: \_\_\_\_\_

# of real solutions: 2: \_\_\_\_\_

1: \_\_\_\_\_

0: \_\_\_\_\_

sol( $x = ?$ )ving

Quadratic<sup>2</sup> Equa = tions

Standard Form: \_\_\_\_\_

Synonyms for *solutions*:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## COMPLETING THE SQUARE

Eq: \_\_\_\_\_

Best use when  $a =$  \_\_\_\_\_,  $b =$  \_\_\_\_\_

### Instructions

Place each equation in an appropriate box and solve accordingly. Write solutions in radical form and round solutions to tenths. Write the steps as you solve.

$$3x^2 - 75 = 0$$

$$2x^2 - 50x = 0$$

$$x^2 + 2x - 13 = 0$$

$$x^2 - 5x - 14 = 0$$

$$2x^2 + 7x + 4 = 0$$

$$2x^2 - 7x + 5 = 0$$

$$3x^2 + 30x = -2$$

$x =$  \_\_\_\_\_

$x \approx$  \_\_\_\_\_

## QUADRATIC FORMULA

$x =$  \_\_\_\_\_

Eq: \_\_\_\_\_

# of real solutions:

2 when \_\_\_\_\_

1 when \_\_\_\_\_

0 when \_\_\_\_\_

**Discriminant**

D = \_\_\_\_\_

$x =$  \_\_\_\_\_

$x \approx$  \_\_\_\_\_

Use