*Solving Quadratic Equations*

Instructions: With your partner, select and complete three squares in the same direction on the board. (Round to the nearest hundredth, if necessary.) **You must complete the middle square**! You must show all your work in the square! You must hand in your own Think-Tac-Toe board.

If you are done before time is up, choose another direction and write those answers on the back of your board!

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Solve 2*x*2 + 10*x* + 12 = 0

Solve 4*x*2 – 576 = 0

Solve 3*a*2 – 36*a* + 81 = 0

Solve *x*2 + 8*x* + 5 = 0

Solve 32*x*2 – 18 = 0

Solve 4*n*2 – 75 = 0

Solve *x*2 + 5*x* – 90 = 0

Solve *x*2 – 30 = 0

A polynomial that has two terms is called a(n) \_\_\_\_\_\_\_\_\_\_

A rectangular poster has area 190 in2. The height of the poster is 2*x* – 1 and the width is *x*.

Find *x*.

Your community wants to put a square fountain with dimension *x*ft in a park. Around the fountain will be a sidewalk that is 3.5ft wide. The total area that the fountain and sidewalk can be is 700 ft2. Find *x*.

The volume of the rectangular prism below is 4368 units3. Find *x*.



The area of the rectangle is 91 units2. Find *p*.



Solve *y*2 + 14*y* + 13 = 0

Solve *t*2 – 10*t* = 39

Solve *x*2 + 5*x* + 6 = 0

Solve *x*2 – 30 = 0

The sum of the exponents of the variables in a monomial is the \_\_\_\_\_\_\_\_\_\_\_\_ .

Suppose you are building a

storage box of volume 4368in3.

The length of the box will be

24 in. The height of the box

will be 1 in. more than its

width. Find the height and

width of the box.

A rectangular has an area of

190in2. The height of the

poster is 1 in. less than

twice its width. Find the

dimensions of the poster.

A rectangular painting has

dimensions *x* and *x* + 10. The

painting is in a frame 2in. wide.

The total area of the picture

and the frame is 900in2. What

are the dimensions of the

painting?

Your community wants to put

a square fountain with

dimension *x*ft in a park.

Around the fountain will be a

sidewalk that is 3.5ft wide.

The total area that the

fountain and sidewalk can be

 is 700 ft2. Find *x*.

The volume of the rectangular

prism below is 4368 units3. Find *x*.



The area of the rectangle is

91 units2. Find *p*.



A polynomial that is the product

of 2 identical binomial factors is

a (n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Solve *x*2 – 30 = 0

Solve *x*2 + 5*x* + 6 = 0