



# Solving Quadratics by SQUARE ROOTS

## SCAVENGER HUNT



# Solving Quadratics by SQUARE ROOTS Scavenger Hunt!

**Objective:** Students will practice solving quadratic equations by using square roots. Students will need to isolate the squared term by doing inverse operations to remove constants and coefficients, then take the square root of both sides. Solutions are both rational and irrational. There is one problem with no real solutions ( $\emptyset$ ).

**There is a version with answers in simplest radical form and a version with solutions rounded to the nearest hundredth. Choose the version that works best for your students!**

**Directions:**

- 1) Print the 15 stations and scatter around the room (and in the hallway, if possible, the students love to leave the room!).
- 2) Distribute the recording worksheet to each student, then place students in groups of 2-3 and assign a starting problem. They solve the problem at their station. The answer they get will lead them to the next station. They continue looping around until they have completed all 15 stations. **Be sure students record the letter at each station to make it easier for you to grade!**

**SOLVING QUADRATICS by Square Roots**  
Name: \_\_\_\_\_  
Date: \_\_\_\_\_  
Directions: Beginning of any problem, solve the problem, then use your answer to problem to go to next. Be sure to write down the letter of the problem at each station. You should end at the problem you started with.

**PREVIOUS ANSWER:**  $x = \{\pm 2\sqrt{15}\}$   
**SOLVING QUADRATICS by Square Roots**  
**A** Solve:  
 $3x^2 - 17 =$

**PREVIOUS ANSWER:**  $x = \emptyset$   
**SOLVING QUADRATICS by Square Roots**  
**F** Solve:  
 $60 = \frac{1}{4}x^2 + 11$

**PREVIOUS ANSWER:**  $x = \{\pm 6\sqrt{3}\}$   
**SOLVING QUADRATICS by Square Roots**  
**H** Solve:  
 $26 + 2x^2 = 2$

**PREVIOUS ANSWER:**  $x = \{\pm \frac{8}{3}\}$   
**SOLVING QUADRATICS by Square Roots**  
**K** Solve:  
 $\frac{3}{4}x^2 + 8 = 224$

**RECORD THE LETTERS OF THE SCAVENGER HUNT IN THE ORDER THAT YOU SOLVED THEM:**

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