

## “Who Has?” Game

This game is useful to help students memorize important facts, such as simplifying square roots. I usually make 30 cards in a set. Each student should get one card, but some students might have two cards depending on the size of the class. Each card has an answer at the top and a question at the bottom, except for two special cards. One of the special cards has the word “START” at the top. It has the first question. To begin the game the student with the “START” card says “I have START. Who has....?” and then reads the first question printed on the card. Then the rest of the class looks for the answer to that question printed on the top of their card and whoever has the answer says “I have ....Who has....?” and reads the answer then their question. This continues until all of the cards have been used and the only card remaining is the other special card. This card has the last answer at the top and at the bottom it says “ THE END”. This indicates that the game is finished. During the game use the answer key to make sure that the student’s answers are correct. If a student gives the wrong answer, stop the game, repeat the question, and then resume the game.

This game makes a good warm-up activity to begin the class. I will usually let the class play the game twice a day (switch cards between games) for 5 or 6 days. I usually use a stopwatch to time the class and give bonus points if they can complete the game in under a certain amount of time. If I have two classes both doing the game I might give bonus points to the class with the faster time. Students like competition, so I usually don’t have to give very many points. If I am trying to get students to memorize something I will give them a list of the facts that I want them to know the first day. The first few times I do the game I will let them use the list of facts but then later I make them play the game without the list.

Helpful hints: 1) If a student has 2 cards they might have the answer to their own question so tell them to look. 2) If a question has not been answered after a long pause, repeat the question and then ask if anyone knows the answer, then make the student with the correct answer read the card and continue the game. 3) Whichever students get the “START” and “END” cards should get another card as well. 4) Laminate the cards to keep students from writing down the answers on the cards. 5) Questions that involve several steps (like solving equations) do not work well with this game. 6) This game works with all age levels. I have used it with 7<sup>th</sup> graders to learn decimals and high school seniors to learn trigonometry. 7) Write the questions and answers on index cards or type them onto large address labels that you can stick on index cards. The cards that I have made can be printed on a sheet of ten 2” by 4” address labels. You can also print the cards on card stock and then cut them apart.

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## “Who Has?” Square Roots

I have START

Who has  $\sqrt{400}$  ?

I have 20

Who has  $\sqrt{90}$  ?

I have  $3\sqrt{10}$

Who has  $\sqrt{169}$  ?

I have 13

Who has  $\sqrt{20}$  ?

I have  $2\sqrt{5}$

Who has  $\sqrt{25}$  ?

I have 5

Who has  $\sqrt{0}$  ?

I have 0

Who has  $\sqrt{81}$  ?

I have 9

Who has  $\sqrt{28}$  ?

I have  $2\sqrt{7}$

Who has  $\sqrt{50}$  ?

I have  $5\sqrt{2}$

Who has  $\sqrt{99}$  ?

I have  $3\sqrt{11}$

Who has  $\sqrt{121}$  ?

I have 11

Who has  $\sqrt{32}$  ?

I have  $4\sqrt{2}$

Who has  $\sqrt{1}$  ?

I have 1

Who has  $\sqrt{36}$  ?

I have 6

Who has  $\sqrt{75}$  ?

I have  $5\sqrt{3}$

Who has  $\sqrt{18}$  ?

I have  $3\sqrt{2}$

Who has  $\sqrt{100}$  ?

**I have 10**

**Who has  $\sqrt{4}$  ?**

**I have 2**

**Who has  $\sqrt{8}$  ?**

**I have  $2\sqrt{2}$**

**Who has  $\sqrt{48}$  ?**

**I have  $4\sqrt{3}$**

**Who has  $\sqrt{12}$  ?**

**I have  $2\sqrt{3}$**

**Who has  $\sqrt{49}$  ?**

**I have 7**

**Who has  $\sqrt{9}$  ?**

**I have 3**

**Who has  $\sqrt{900}$  ?**

**I have 30**

**Who has  $\sqrt{40}$  ?**

**I have  $2\sqrt{10}$**

**Who has  $\sqrt{144}$  ?**

**I have 12**

**Who has  $\sqrt{44}$  ?**

**I have  $2\sqrt{11}$**

**Who has  $\sqrt{24}$  ?**

**I have  $2\sqrt{6}$**

**Who has  $\sqrt{64}$  ?**

**I have 8**

**THE END**

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