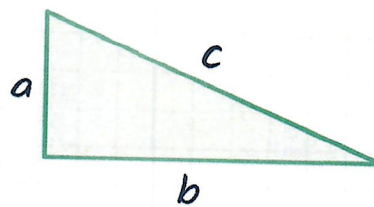


Pythagorean Theorem Vocabulary Match Game



$$a^2 + b^2 = c^2$$

STANDARD: (TEKS): 8.7.C. Use the Pythagorean Theorem and its converse to solve problems

MATERIALS: 1 set of cards, different color cards for terms, definitions, and images
Paper and Pencil
Recording Sheet
Answer Key

DIRECTIONS:

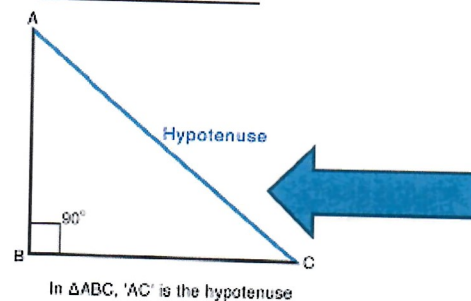
1. Arrange the cards face down in an array so that student pairs can reach them.
2. Have a pair of students turn over two of the cards and try to determine if the cards are a match. (Pairs take turns turning over a card.)
3. Other pairs share whether or not they agree. Discussion is encouraged by the teacher or the Leader.
4. If there is a match, then the pair gets to keep the cards. If there is not a match, then the cards remain face up.
5. When a match of two cards is made, then the two cards may be set in front of the pair. They must **FIND THE REMAINING TWO CARDS** to complete the set.
6. If a player turns over a card that matches another pair's 2-card or 3-card set, they may "steal" the pair's cards and keep the match.
7. Continue with the remaining cards.
8. All players complete the recording sheet.

Challenge: Create new sets of cards.

Perfect Square Chart

$$\begin{array}{ll} 1^2 = 1 & 6^2 = 36 \\ 2^2 = 4 & 7^2 = 49 \\ 3^2 = 9 & 8^2 = 64 \\ 4^2 = 16 & 9^2 = 81 \\ 5^2 = 25 & 10^2 = 100 \end{array}$$

Hypotenuse of a Triangle



IRRATIONAL NUMBERS

Numbers that CANNOT be represented as a simple fraction

Important Property

Decimals NEVER REPEAT

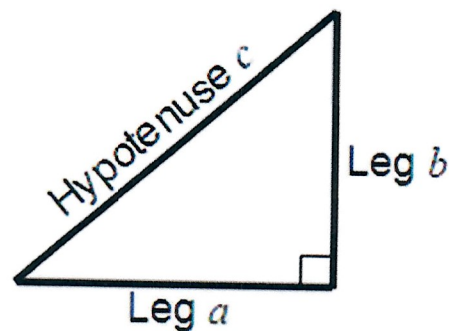
Decimals NEVER END

Examples

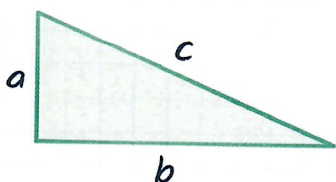
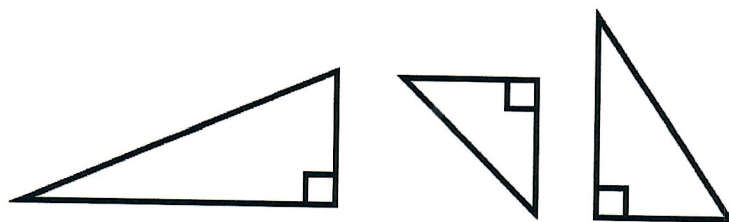
$\pi = 3.1415926...$

$\sqrt{2}$

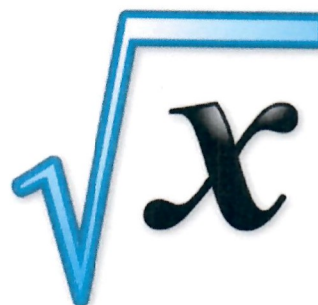
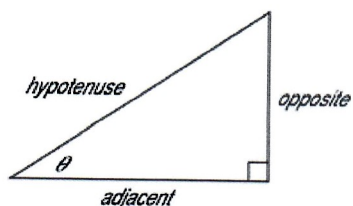
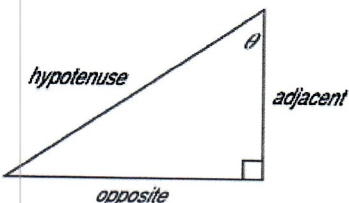
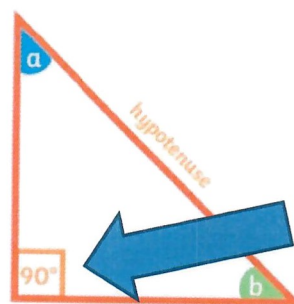
An



radical sign



$$a^2 + b^2 = c^2$$



A number that is the square of an integer

perfect square

A real number that cannot be expressed as a decimal that terminates or repeats.

irrational number

The square root symbol

radical sign

$$a^2 + b^2 = c^2$$

Pythagorean Theorem

Sides of a polygon that have a common vertex

adjacent sides

The longest side
of a right triangle

hypotenuse

Name of the two sides
of the right triangle
that are adjacent to
the right angle

legs

A triangle with
one right angle

right triangle

An angle that
measures 90
degrees

right angle

The inverse of
squaring a number

square roots

Name: _____ Pythagorean Theorem Vocabulary Game, **RECORDING SHEET**

Select 4 of the terms you matched. Create a different icon to help someone remember the term.

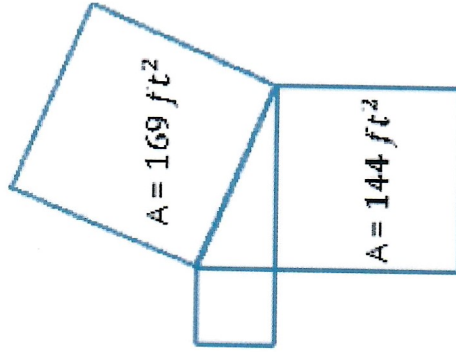
What are the two most important math concepts to remember from this game? Why?

Name

Pythagorean Theorem Vocabulary Match Game

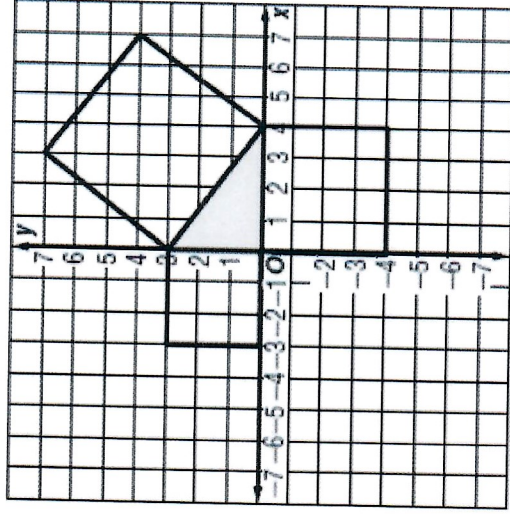
Circle the correct solution. Show your work next to the problem.

Find the *area* of the smallest side of the right triangle.



- A. 25 ft
- B. 5 ft
- C. 313 ft
- D. 13 ft

What is the area of the medium square in the figure shown?



- A. 5 square units
- B. 9 square units
- C. 16 square units
- D. 25 square units

The length of two sides of a right triangle are leg: 12 m and hypotenuse: 15 m. Find the length of the third side.

- A. 1 m
- B. 6 m
- C. 9 m
- D. 17 m