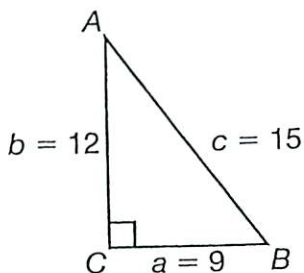


Name: _____

Try It!

Use the right triangle below for Questions 1-4.

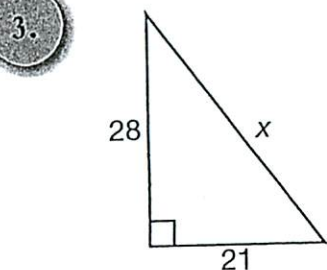


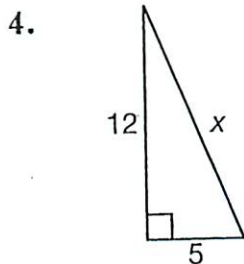
1. What is the length of the hypotenuse?

2. What are the lengths of the legs?

_____ and _____

Each triangle is a right triangle. Find the unknown length.





Solve.

5. A rectangle is 3 feet wide and 4 feet long. How long is the diagonal of the rectangle? _____

1. Which is the longest side? b , or c ?

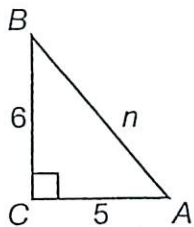
3. What is 28^2 ? 784, or 441?

5. A rectangle has what type of angles? small, or right?

On Your Own!

Circle the answer for each question.

Use the right triangle below for Questions 1 and 2.



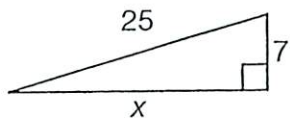
1. Which expression can you use to find the length of hypotenuse n ?

- A. $\sqrt{6^2 + 5^2}$
- B. $\sqrt{6^2 - 5^2}$
- C. $\sqrt{6^2} + \sqrt{5^2}$
- D. $6^2 + 5^2$

2. Which is the length of the shortest leg?

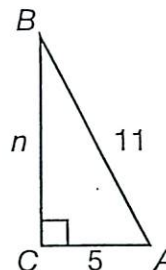
- A. 11
- B. 7
- C. 6
- D. 5

3. What is the length of side x ?



- A. 25
- B. 24
- C. 18
- D. 7

Use the right triangle below for Questions 4 and 5.



4. Which expression can you use to find the length of leg n ?

- A. $\sqrt{11^2 + 5^2}$
- B. $\sqrt{11^2 - 5^2}$
- C. $\sqrt{11^2} + \sqrt{5^2}$
- D. $\sqrt{11^2} - \sqrt{5^2}$

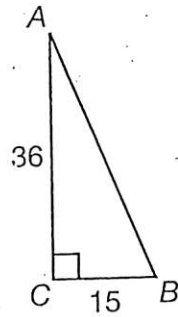
5. What is the length of the hypotenuse?

- A. 121
- B. 25
- C. 11
- D. 5

6. A painting of hot air balloons above Glens Falls is 9 inches wide and 12 inches long. What is the length of a diagonal of the painting?

- A. 21 in.
- B. 18 in.
- C. 15 in.
- D. 3 in.

7. Use right triangle ABC below.



Part A Find the lengths of the legs of triangle ABC .

_____ and _____

Part B Use the Pythagorean theorem to find the length of side AB .

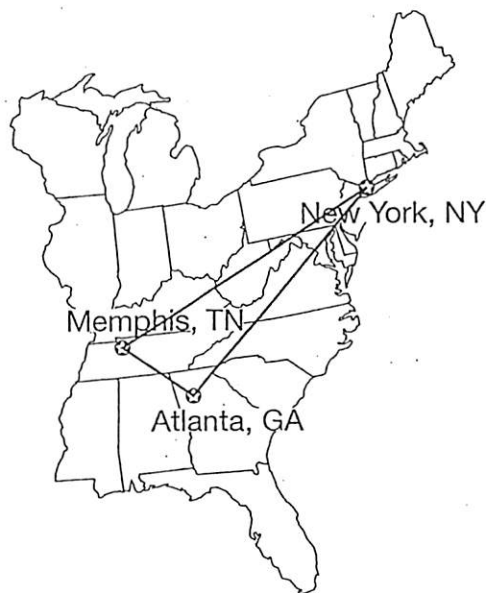
Show your work.

**Math
Words**

Fill in the blanks.

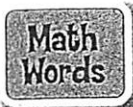
8. The longest side of a right triangle is the _____.
9. To find an unknown side length of a right triangle, use the _____
_____.
10. The formula for the Pythagorean theorem is _____.
11. Every right triangle has one _____.

9. Janice flew 954 miles from New York, NY to Memphis, TN. Then she flew 337 miles from Memphis to Atlanta, GA. Then she flew 748 miles from Atlanta back to New York, NY.



Part A Did Janice's trip make a right triangle?

Part B Use what you know about right triangles to explain why your answer is correct. Use words and/or numbers to support your decision.



Fill in the blank.

10. "If $a^2 + b^2 = c^2$, then the triangle is a right triangle" is the _____ of the Pythagorean theorem.

