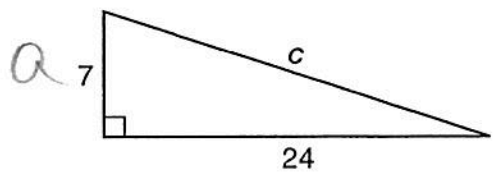


Name: Key
Mrs. Roubos

Date: _____
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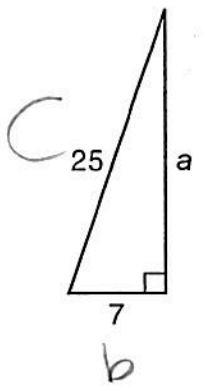
Pythagorean Theorem Homework

- 1) What is the length of the hypotenuse of the right triangle pictured below?



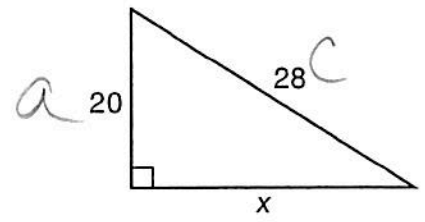
$$a^2 + b^2 = c^2$$
$$7^2 + 24^2 = c^2$$
$$49 + 576 = c^2$$
$$\sqrt{625} = \sqrt{c^2}$$
$$c = 25$$

- 2) What is the measure of the missing leg in the right triangle pictured below?



$$a^2 + b^2 = c^2$$
$$a^2 + 7^2 = 25^2$$
$$a^2 + 49 = 625$$
$$\begin{array}{r} a^2 + 49 = 625 \\ -49 \quad -49 \\ \hline a^2 = 576 \end{array}$$
$$a = 24$$

- 3) What is the measure of the missing leg in the right triangle pictured below?
*Nearest tenth



$$a^2 + b^2 = c^2$$
$$20^2 + b^2 = 28^2$$
$$400 + b^2 = 784$$
$$\begin{array}{r} 400 + b^2 = 784 \\ -400 \quad -400 \\ \hline b^2 = 384 \end{array}$$
$$b = 19.6$$

- 4) What is the side opposite the right angle in a right triangle called?

hypotenuse