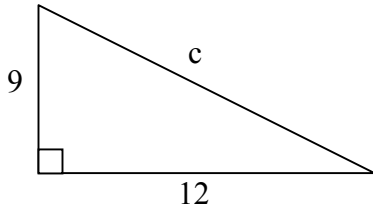


**PYTHAGOREAN THEOREM
ALGEBRA – EXAMPLES**

NAME: _____
PERIOD: ____ #: ____

1. What is the length of the hypotenuse of the triangle?



Write the Pythagorean Theorem: _____

Substitute 9 for a and 12 for b : _____

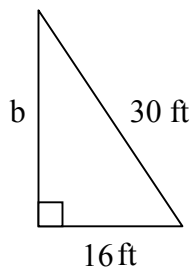
Simplify: _____

To get c by itself, take the square
Root of both sides: _____

Write the answer: _____

$c =$ _____

2. Find the length of the missing side in the triangle below.



Write the Pythagorean Theorem: _____

Substitute 16 for a and 30 for c : _____

Simplify: _____

Subtract 256 from both sides: _____

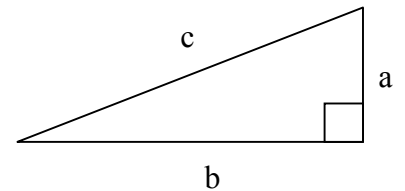
To get b by itself, take the square
Root of both sides (calculator is ok): _____

Write the answer: _____

$b =$ _____ ft.

Using the triangle at the right, find the length of the missing side.

3. $a = 6$, $b = 8$, $c = ?$



4. $a = 3$, $b = ?$, $c = 5$

5. $a = ?$, $b = 10$, $c = 15$ (Round to nearest tenth)

6. A pigeon leaves its nest and flies 5 km due east. Then he flies 3 km due north. How far is the pigeon from his nest? (Draw a picture! Round to nearest tenth).