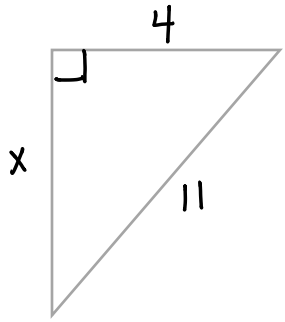
Name:

UNIT 9 DAY 20

HOMEWORK

Solve for x in each right triangle.

1. 

$x^2+4^2=11^2$

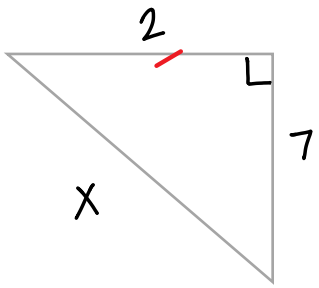
$x^2+16=121$

$x^2=\sqrt{105}$

5 21

7 3

$x=\sqrt{105}$

2. 

$2^2+7^2=x^2$

$4+49=x^2$

$\sqrt{53}=\sqrt{x^2}$

$\sqrt{53}=x$

Determine if the given side lengths would form a right triangle.

3. 5, 7, 8

$5^2+7^2=8^2$

$25+49=64$

$74\neq64$

NO

4. 4, 10, 8

$4^2+8^2=10^2$

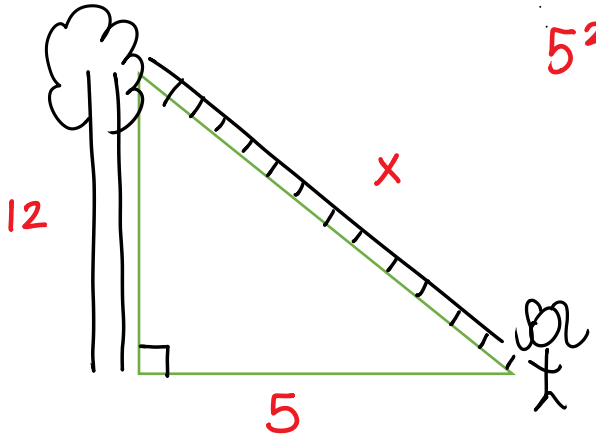
$16+64=100$

$80\neq100$

NO

Solve the word problem.

4. Ms. Suchomel is trying to get her dog Ferdinand out of a tree. She has a ladder to the tree. The base of the ladder is 5 feet from the tree. The tree is 12 feet tall. How long is the ladder?



$5^2+12^2=x^2$

$\sqrt{169}=\sqrt{x^2}$

$13=x$

13 feet Long