Pythagorean Theorem

Look out for hidden right triangles where you may need to use $a^2 + b^2 = c^2$

a and b are the legs

c is the hypotenuse

Know your Pythagorean Triples!

3,4,5

5,12,13

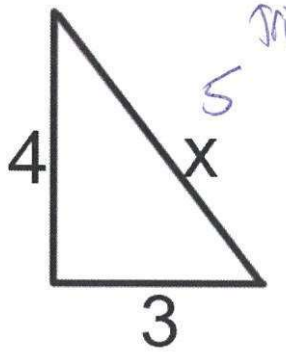
7,24,25

8,15,17

9,40,41

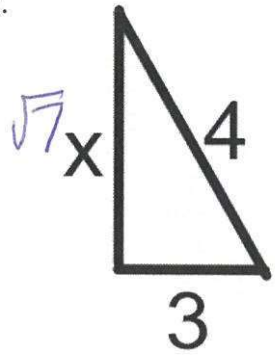
Find the missing side of each right triangle ~~**rounding to the nearest tenth**~~ leaving your answer in radical form

1.



Triple

2.



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

$3^2+x^2=4^2$

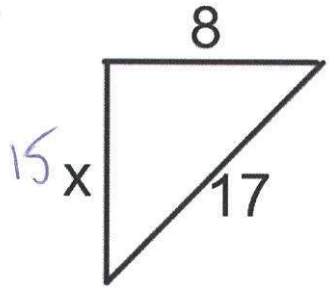
$9+x^2=16$

$-9 \quad -9$

$\sqrt{x^2}=\sqrt{7}$

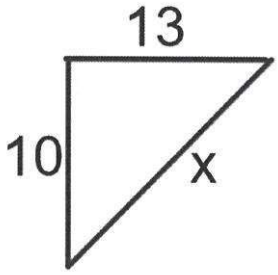
$x=\sqrt{7}$

3.



Triple

4.



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

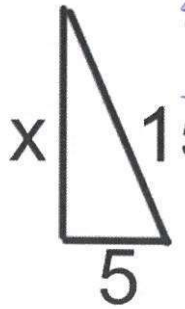
$10^2+13^2=x^2$

$100+169=x^2$

$\sqrt{269}=\sqrt{x^2}$

$\sqrt{269}=x$

5.



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

$5^2+x^2=15^2$

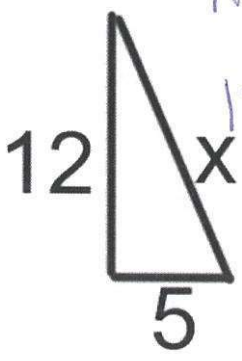
$25+x^2=225$

$-25 \quad -25$

$\sqrt{x^2}=\sqrt{200}$

$x=\sqrt{200}$

6.



Triple