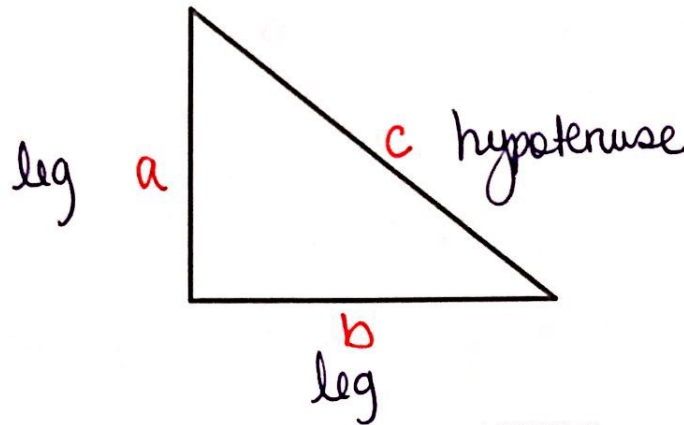


Day 3 – Pythagorean Theorem Review – Notes

The **Pythagorean Theorem** is a method for finding any missing side of a right triangle when given the other two sides. The formula for Pythagorean Theorem is $a^2 + b^2 = c^2$, where a and b are the **legs** of the triangle and c is the **hypotenuse**.



Pythagorean Thm
If a triangle is a right triangle,
Then $a^2 + b^2 = c^2$

COMMON PYTHAGOREAN TRIPLES AND SOME OF THEIR MULTIPLES

The most common Pythagorean triples are in bold. The other triples are the result of multiplying each integer in a bold face triple by the same factor.

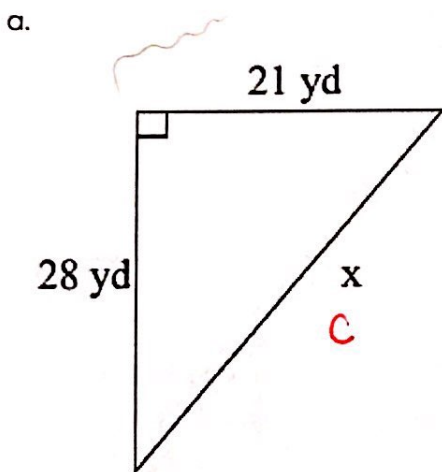
3, 4, 5
6, 8, 10

5, 12, 13
10, 24, 26

8, 15, 17
16, 30, 34

7, 24, 25
14, 48, 50

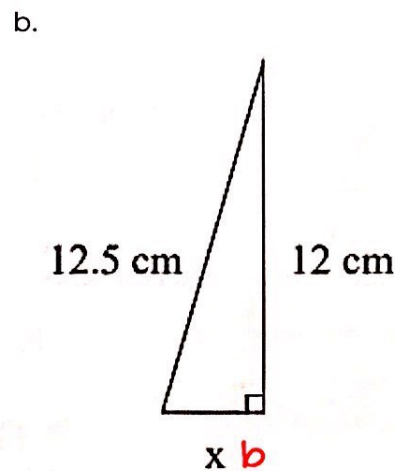
Examples: Find the length of the missing side.



$$28^2 + 21^2 = c^2$$

$$\sqrt{1225} = \sqrt{c^2}$$

$$\boxed{35 \text{ yd} = c}$$



$$12^2 + b^2 = 12.5^2$$

$$144 + b^2 = 156.25$$

$$\sqrt{b^2} = \sqrt{12.25}$$

$$\boxed{b = 3.5 \text{ cm}}$$