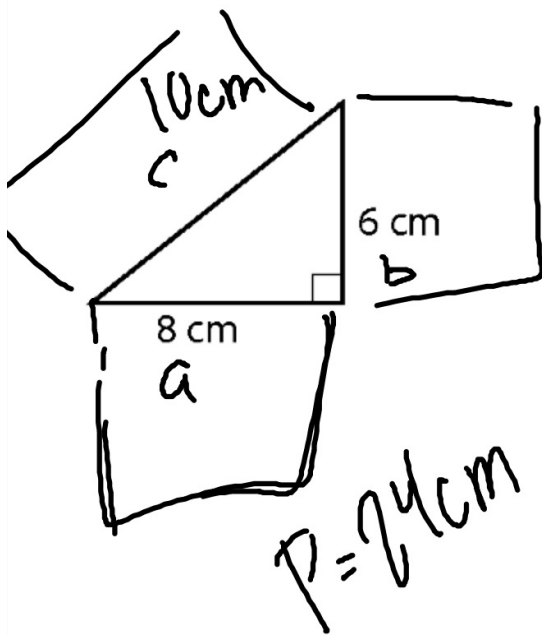


Pythag.

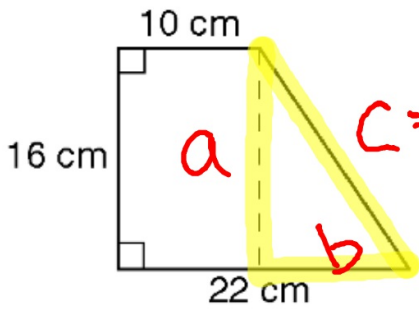
$$a^2 + b^2 = c^2$$

legs

hypotenuse



$$8^2 + 6^2 = c^2$$
$$64 + 36 = c^2$$
$$\sqrt{100} = c$$
$$10 = c$$



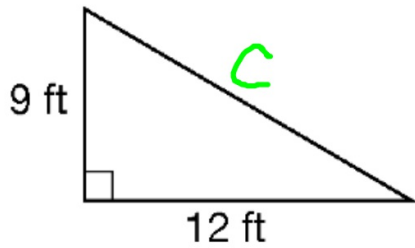
$$a^2 + b^2 = c^2$$

$$16^2 + 12^2 = c^2$$

$$256 + 144 = c^2$$

$$\sqrt{400} = c$$

$$20 = c$$

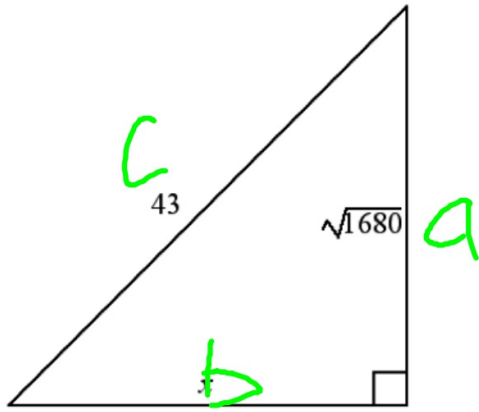


$$\begin{aligned}9^2 + 12^2 &= c^2 \\81 + 144 &= c^2 \\ \sqrt{225} &= \sqrt{c^2} \\ 15 &= c\end{aligned}$$

$$\sqrt{13^2 - 12^2}$$

$$\sqrt{169 - 144}$$

$$\begin{aligned}\sqrt{25} \\ \textcircled{5}\end{aligned}$$



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

$$\sqrt{1680}^2 + b^2 = 43^2$$

$$1680 + b^2 = 1849$$

$$1849 - 1680 = b^2$$

$$\frac{1680}{169} \quad \sqrt{169} = \sqrt{b^2}$$

13

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

$$\sqrt{x \cdot x} = x$$

L21: DISTRIBUTIVE PROPERTY

$$a(b+c)$$

$$2(3+4)$$

$$a \cdot b + a \cdot c$$

$$2(7)$$

$$ab + ac$$

$$14$$

$$2(3+4)$$

$$6+8$$

$$14$$

$$2(3+q)$$
$$2 \cdot 3 + 2 \cdot q$$
$$(6+2q)$$

expand

$$4(3-1) \qquad 7(q-4)$$
$$4 \cdot 3 - 4 \cdot 1 \qquad 7 \cdot q - 7 \cdot 4$$
$$12 - 4 \qquad (7q - 28)$$
$$8$$

factor GCF

$$ab + ac$$

$$a(b+c)$$

$$2x+4$$

$$2(x+2)$$

$$\frac{8w}{4} + \frac{12}{4}$$

$$4(2w+3)$$

ORDER OF OPERATIONS

Parenthesis

Exponents

M/D multiply/divide left to right

A/S add/subtract left to right

$$10 - (8 - [6 - (5 - 3)])$$

$$10 - (8 - [6 - 2])$$

$$10 - (8 - 4)$$

$$10 - 4$$

$$6$$

$$20 - 2 \cdot 3^2 + (7+8) \div 5$$

$$20 - 2 \cdot 3^2 + 15 \div 5$$

$$20 - 2 \cdot 9 + 15 \div 5$$

$$20 - 18 + 15 \div 5$$

$$20 - 18 + 3$$

$$2 + 3$$

(5)

$$\frac{12 \times 12}{3 + 3} = (12 \times 12) \div (3 + 3)$$

$$144 \div 6$$

(24)

$$\sqrt{16 + 9}$$

$$\sqrt{25}$$

$$5$$