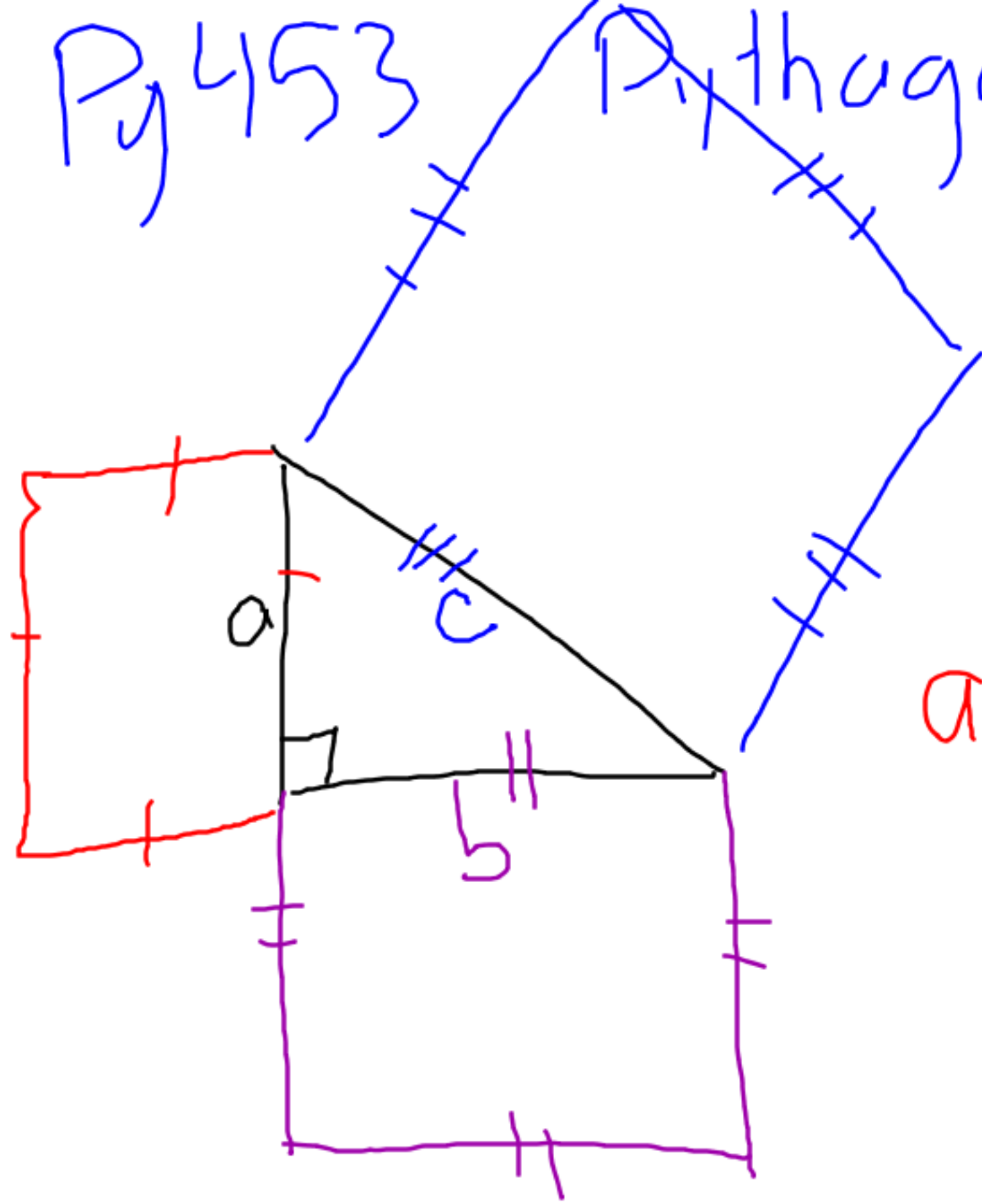


Pg 453

Pythagorean

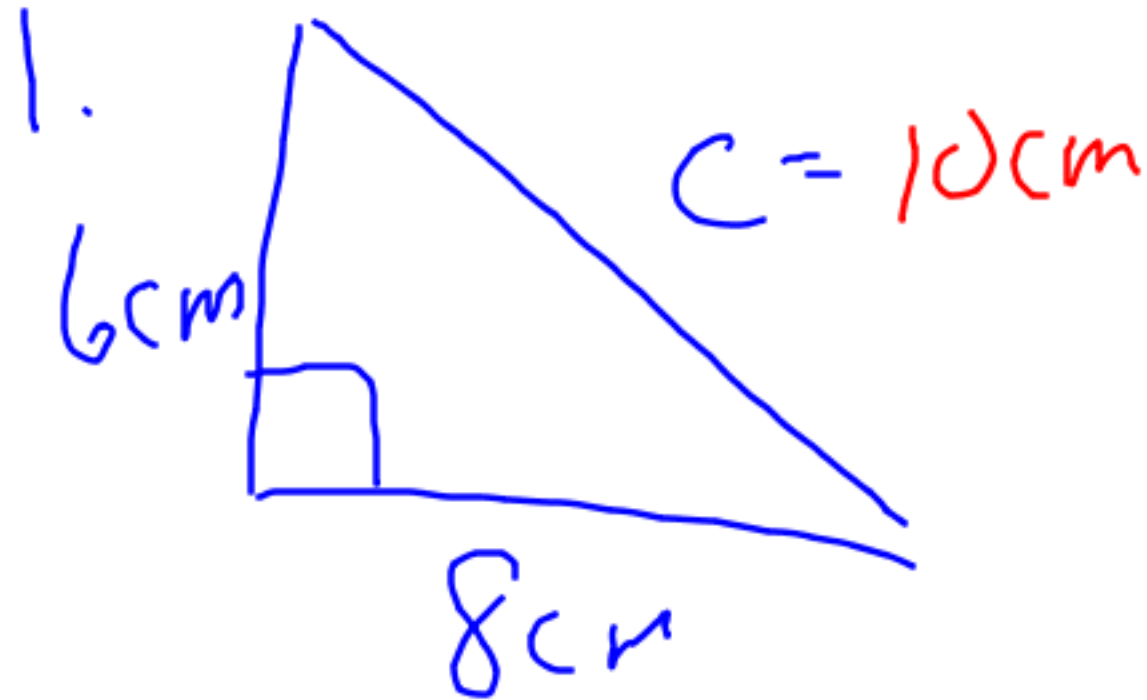
Theore.
Drc 12, 1612

{12, 12, 12}



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

p. 453



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

$$6^2 + 8^2 = c^2$$

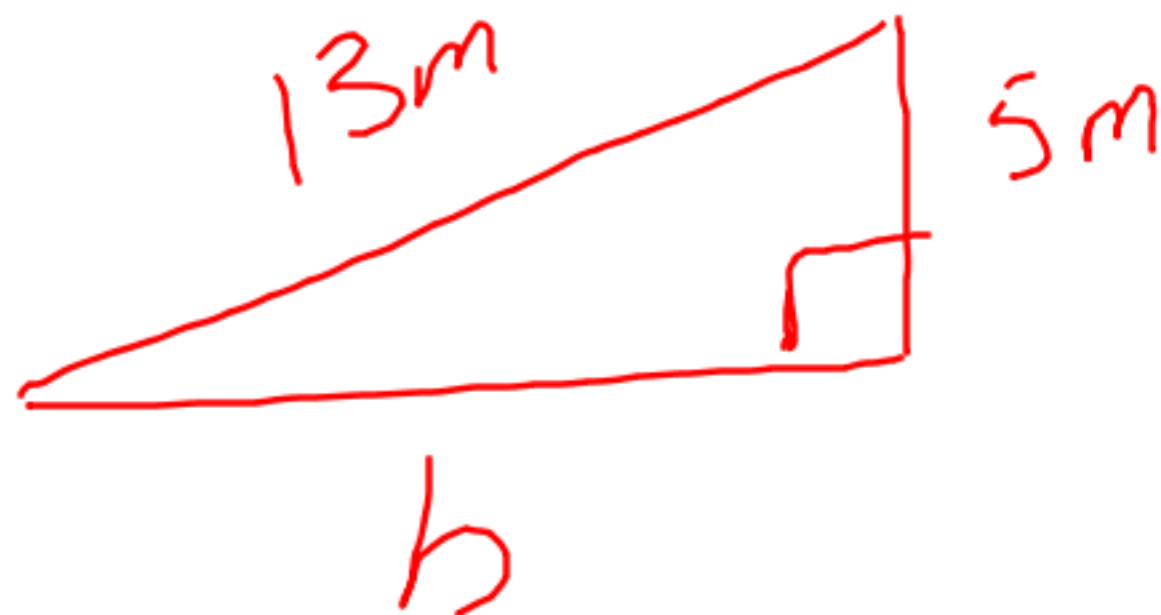
$$36 + 64 = c^2$$

$$100 = c^2$$

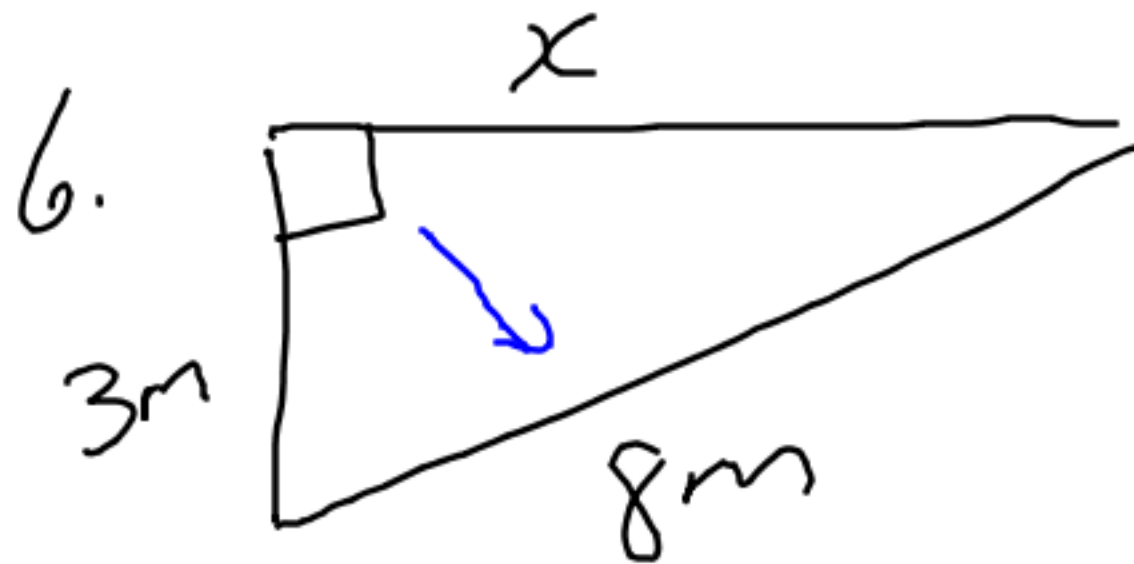
$$c = \sqrt{100}$$

$$c = 10\text{cm}$$

2.



$$\begin{aligned}a^2 + b^2 &= c^2 \\5^2 + b^2 &= 13^2 \\-25 & \\25 + b^2 &= 169 \\b^2 &= 144 \\b &= 12m\end{aligned}$$



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

$$(3)^2 + x^2 = 8^2$$

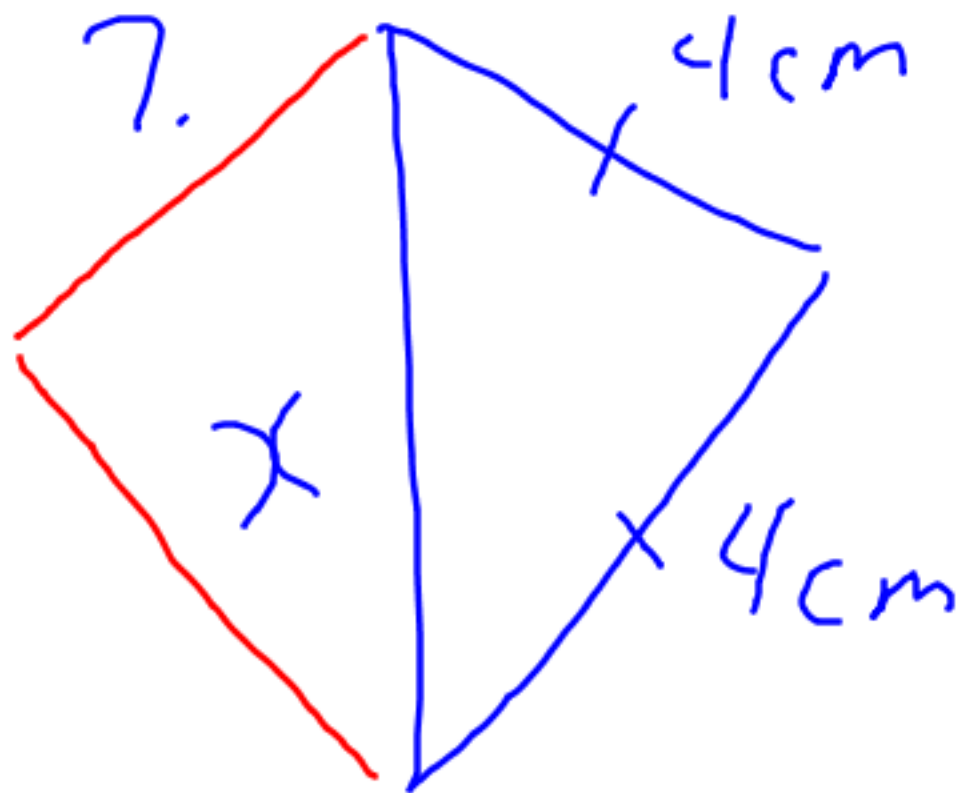
longest side =
hypotenuse
always opposite
the right angle

$$9 + x^2 = 64$$

$$x^2 = 55$$

$$x = \sqrt{55}$$

$$x = 7.4m$$



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

$$4^2 + 4^2 = c^2$$

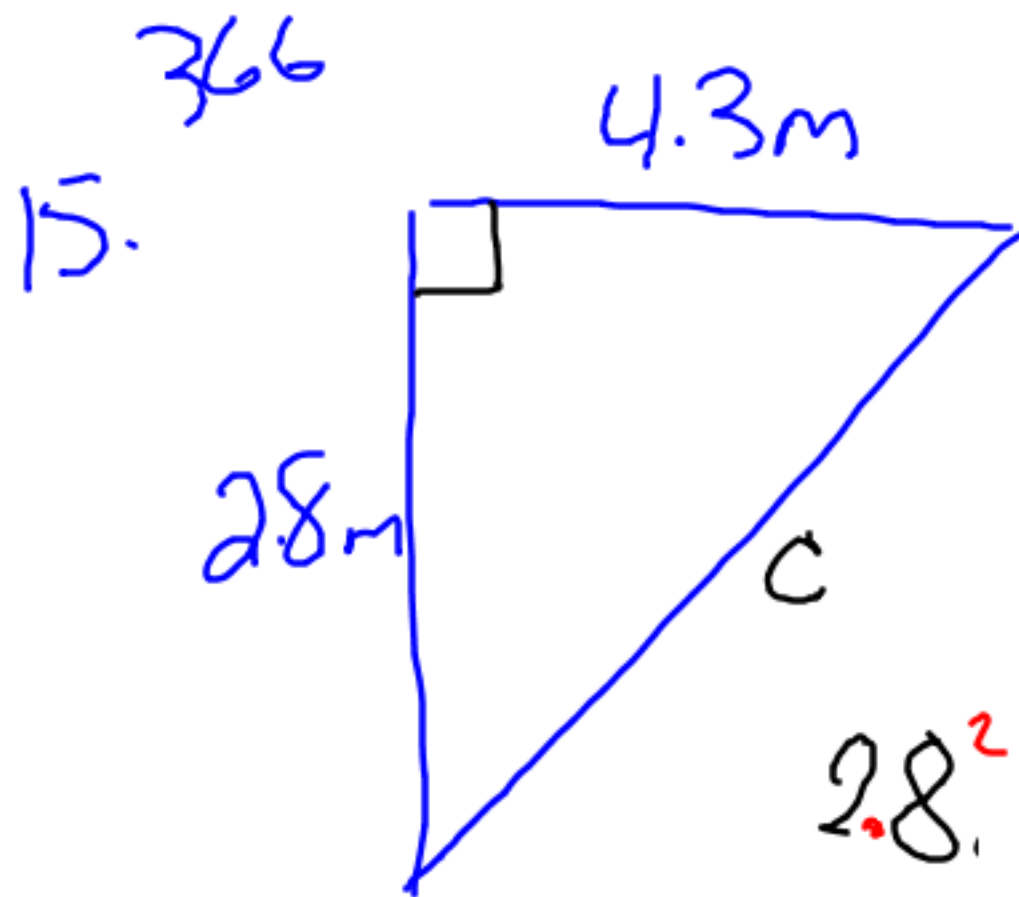
$$16 + 16 = c^2$$

$$32 = c^2$$

$$c = \sqrt{32}$$

$$c = 5.56$$

$$c = 5.6 \text{ cm}$$



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

$$28^2 + 4.3^2 = c^2$$

$$784 + 18.49 = c^2$$

$$c^2 = 26.33$$

$$c = 5.1 \text{ m}$$

p. 369 Working with Formulas Dec. 10

1. $A = Lw$

a) find A if $L = 8\text{cm}$ and $w = 5\text{cm}$

$$A = (8)(5)$$

$$A = 40\text{cm}$$

b) find w , $A = 40\text{m}^2$ $L = 10\text{m}$

$$\frac{A}{L} = \frac{Lw}{L}$$

$$w = \frac{A}{L} = \frac{40}{10} = 4\text{m}$$

$$2. \quad C = 2\pi r$$

C = circumference
 r = radius

a) find C , if $r = 10\text{cm}$

$$C = 2(3.14)(10)$$

$$C = 62.8\text{cm}$$

b) find r , if

$$C = 628$$

$$\frac{C}{2\pi} = \frac{2\pi r}{2\pi}$$

$$r = \frac{C}{2\pi}$$

$$r = \frac{628}{2(3.14)}$$

$$r = \frac{628}{6.28} = 100\text{cm}$$

$$3. A = \frac{1}{2}bh$$



a) find A , if $b = 6\text{cm}$ and $h = 8\text{cm}$

$$A = \frac{(6)(8)}{2}$$

$$A = 24\text{cm}^2$$

b) find h , if

$$\frac{2A}{b} = \frac{bh}{b}$$

$$\frac{2A}{b} = \frac{bh}{b}$$

$$A = 40\text{cm}^2$$

$$b = 4$$

$$h = \frac{2A}{b}$$

$$h = \frac{2(40)}{4}$$

$$h = \frac{80}{4} \quad h = 20\text{cm}$$

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16, 29, 36

hand-out sheet

back 4, 5, 6, 7