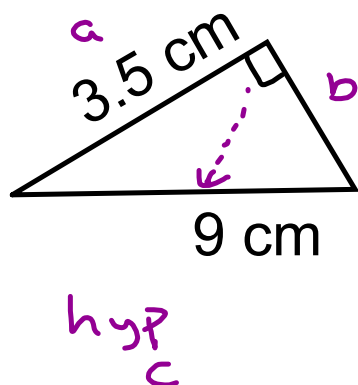


Warm Up

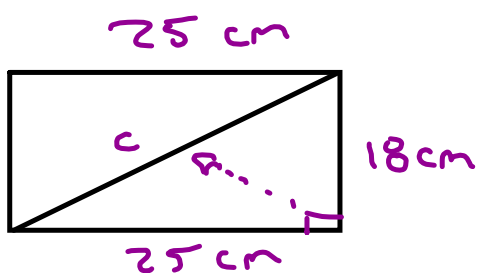
Find the missing side length:



$$\begin{aligned} a^2 + b^2 &= c^2 \\ 3.5^2 + b^2 &= 9^2 \\ + 12.25 + b^2 &= 81 - 12.25 \\ \sqrt{b^2} &= \sqrt{68.75} \\ b &= 8.3 \end{aligned}$$

P5

#2 a)



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

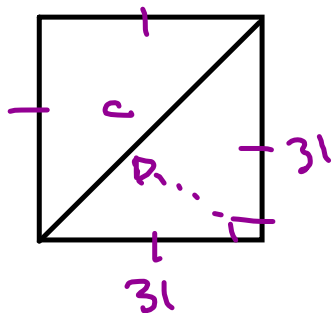
$$25^2 + 18^2 = c^2$$

$$625 + 324 = c^2$$

$$\sqrt{949} = \sqrt{c^2}$$

$$30.8 \text{ cm} = c$$

#2 b)



$$P = \frac{124 \text{ cm}}{4} = \frac{45}{4}$$

31 cm = side

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

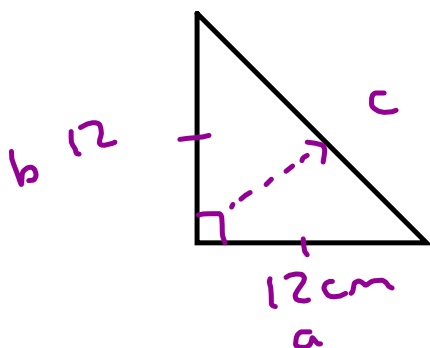
$$31^2 + 31^2 = c^2$$

$$961 + 961 = c^2$$

$$\sqrt{1922} = \sqrt{c^2}$$

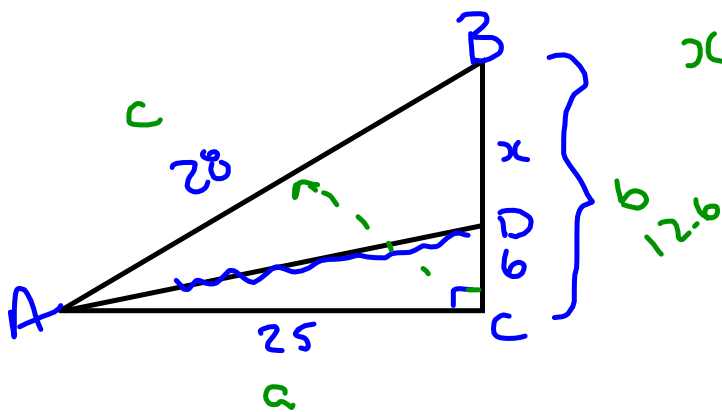
$$43.8 \text{ cm} = c$$

#2 c)



$$\begin{aligned}a^2 + b^2 &= c^2 \\12^2 + 12^2 &= c^2 \\144 + 144 &= c^2 \\\sqrt{288} &= \sqrt{c^2} \\16.97 &= c \\17 \text{ cm} &= c\end{aligned}$$

H3



$x \ x \ x$
 $x = 12.6 - 6 = 6.6 \text{ cm}$

① \overline{BC} :

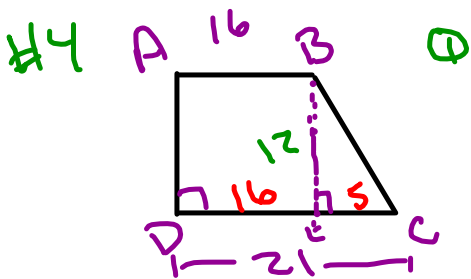
$$a^2 + b^2 = c^2$$

$$25^2 + b^2 = 28^2$$

$$625 + b^2 = 784 - 625$$

$$\sqrt{b^2} = \sqrt{159}$$

$$b = 12.6$$



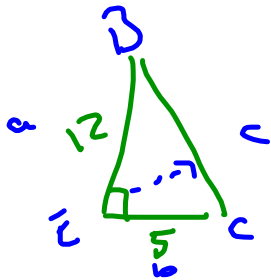
$$A = 222 \text{ cm}^2 = \frac{(B+b)h}{2}$$

$$222 = \frac{(21+16)h}{2}$$

$$222 = \frac{37h}{2}$$

$$\frac{222}{18.5} = \frac{18.5h}{18.5}$$

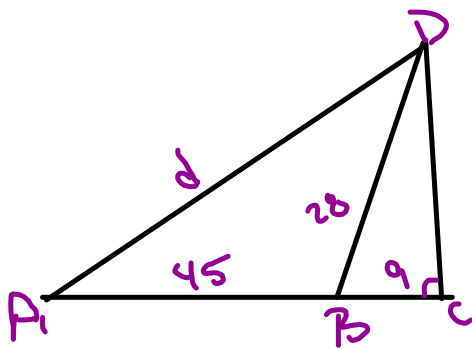
$$12 = h$$



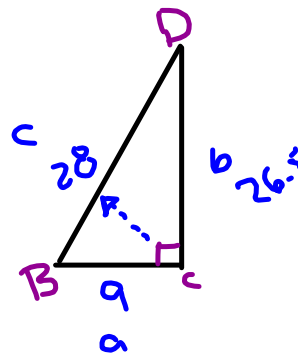
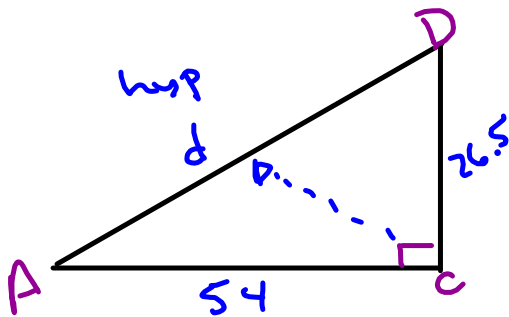
② $a^2 + b^2 = c^2$
 $12^2 + 5^2 = c^2$
 $144 + 25 = c^2$
 $\sqrt{169} = \sqrt{c^2}$

$\rightarrow c = 13 \text{ cm}$

#5



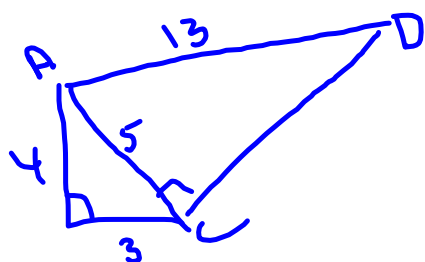
$$\begin{aligned} \textcircled{1} \quad a^2 + b^2 &= c^2 \\ a^2 + b^2 &= 20^2 \\ b^2 &= 20^2 - a^2 \\ b &= 26.5 \end{aligned}$$



②

$$\begin{aligned} d: \quad a^2 + b^2 &= c^2 \\ 54^2 + 26.5^2 &= c^2 \quad \Rightarrow \quad d = 60.2m \end{aligned}$$

#6



$$A = \frac{bh}{2} = 30 \text{ cm}^2$$

Homework

Workbook Pg #7-14