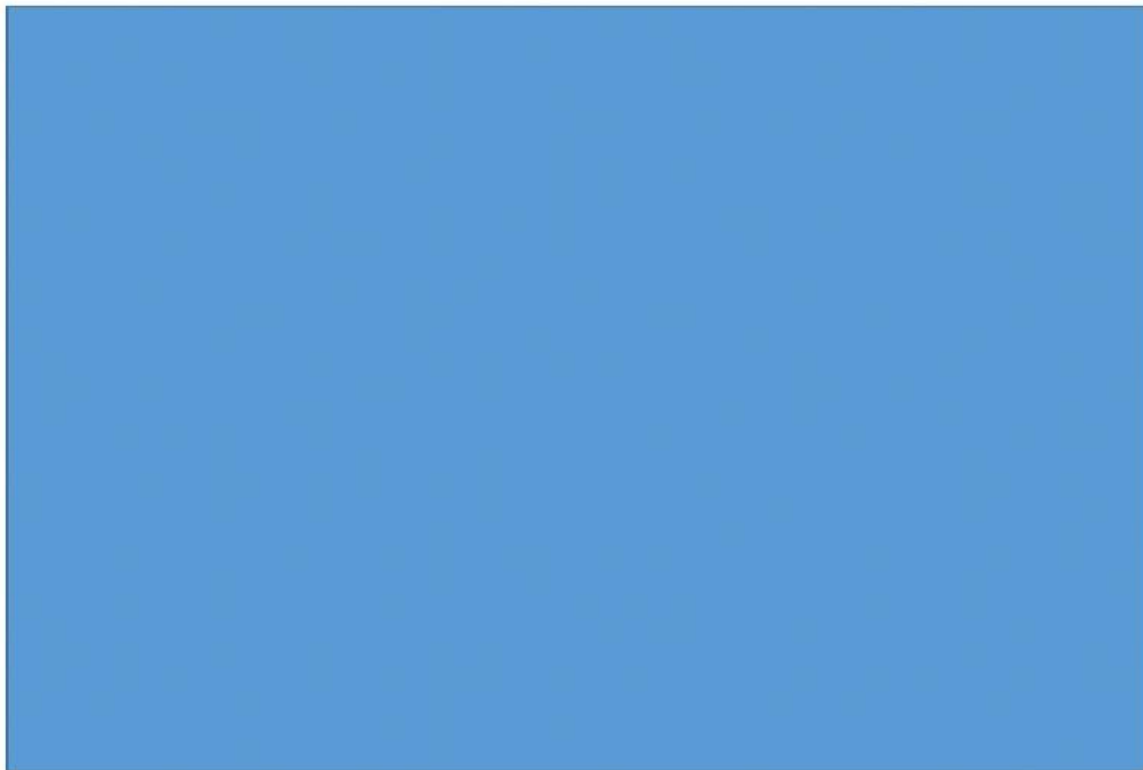


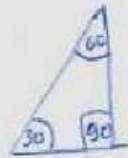
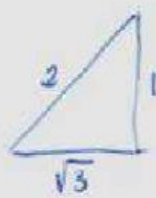


Sebelum menyelesaikan soal-soal yang ibu b!erikan, silahkan diperhatikan penjelasan berikut. Jangan lupa di catat di buku ya....!



Sudut $30^\circ - 60^\circ - 90^\circ$

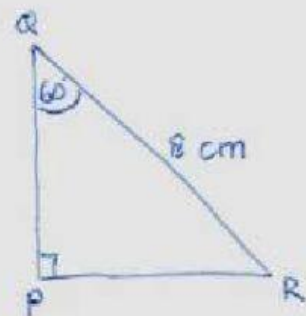
Perbandingan sudutnya $1 : \sqrt{3} : 2$



• Contoh :

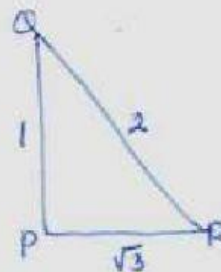
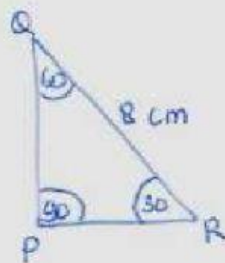
Gambar di samping menunjukkan $\triangle PQR$ dengan siku-siku di P dan $QR = 8 \text{ cm}$ dan $\angle Q = 60^\circ$. Tentukan :

- a. Panjang PQ
- b. Panjang PR



• Penyelesaian :

Perhatikan !



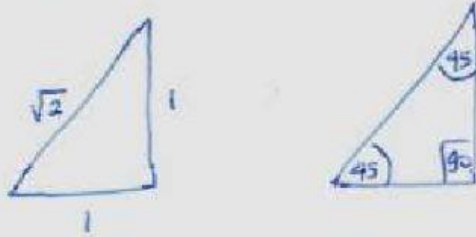
Jadi,

$$\begin{aligned} \text{a. } \frac{QR}{2} &= \frac{PQ}{1} \\ \frac{8}{2} &= \frac{PQ}{1} \\ PQ &= \frac{8 \times 1}{2} \\ PQ &= \frac{8}{2} \\ PQ &= 4 \text{ cm} \end{aligned}$$

$$\begin{aligned} \text{b. } \frac{PR}{\sqrt{3}} &= \frac{QR}{2} \\ \frac{PR}{\sqrt{3}} &= \frac{8}{2} \\ PR &= \frac{8 \times \sqrt{3}}{2} \\ PR &= 4\sqrt{3} \end{aligned}$$

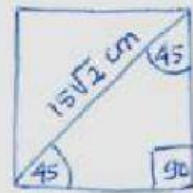
Sudut $45^\circ - 45^\circ - 90^\circ$

Perbandingannya $1 : 1 : \sqrt{2}$



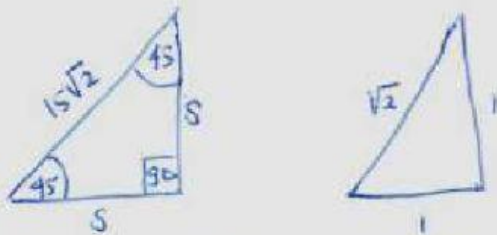
• Contoh :

Panjang diagonal suatu persegi adalah $15\sqrt{2}$ cm. Hitunglah keliling, Luas persegi tersebut!



• Penyelesaian :

Cari dahulu sisi sebelum menentukan keliling & Luas persegi !



$$\begin{aligned}\text{Jadi } \frac{15\sqrt{2}}{\sqrt{2}} &= \frac{\text{sisi (s)}}{1} \\ s &= \frac{15\sqrt{2} \times 1}{\sqrt{2}} \\ s &= \frac{15\sqrt{2}}{\sqrt{2}} \\ s &= 15 \text{ cm}\end{aligned}$$

Sehingga

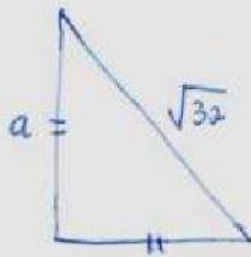
$$\begin{aligned}k &= 4 \times \text{sisi} \\ &= 4 \times 15 \text{ cm} \\ &= 60 \text{ cm}\end{aligned}$$

$$\begin{aligned}L &= \text{sisi} \times \text{sisi} \\ &= 15 \times 15 \\ &= 225 \text{ cm}^2\end{aligned}$$

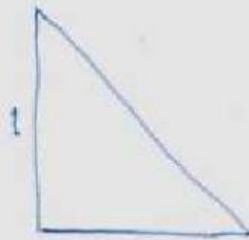
Soal 1

Tentukan panjang sisi yang ditunjukkan oleh huruf pada gambar !

1)



$\Rightarrow$



Perbandingan sudut

$$1 : 1 : \sqrt{2}$$

Jadi, $\underline{a = \sqrt{32}}$

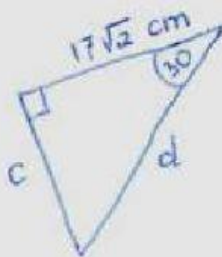
← dikali silang

$$a \times \quad = \sqrt{32} \times$$

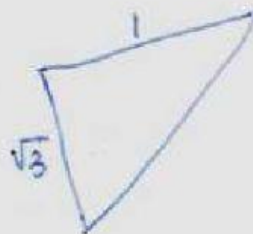
$$a = \underline{\sqrt{32} \times}$$

$$a = \quad \text{cm}$$

2)



$\Rightarrow$



Perbandingannya

$$: :$$

Jadi, $\underline{c = 17\sqrt{2}}$

$$c \times \quad = 17\sqrt{2} \times$$

$$c = \underline{17\sqrt{2} \times}$$

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

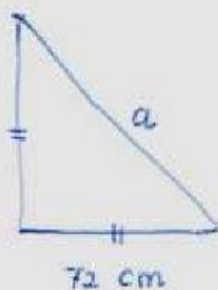
$$\underline{d = 17\sqrt{2}}$$

$$d \times \quad = 17\sqrt{2} \times$$

$$d = \underline{17\sqrt{2} \times}$$

$$d = \quad \text{cm}$$

3)



$\Rightarrow$



Perbandingan

$\therefore \therefore$

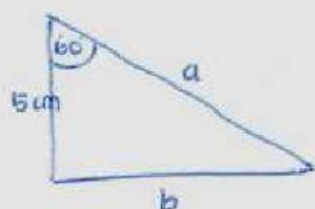
Jadi $\frac{a}{72} = \frac{72}{72}$

$$ax = 72x$$

$$a = \frac{x}{x}$$

$$a = \quad \text{cm}$$

4)



$\Rightarrow$



Perbandingan

$\therefore \therefore$

Jadi,

$$\frac{a}{5} = \frac{5}{5}$$

$$ax = 5x$$

$$a = \frac{5x}{x}$$

$$a = \quad \text{cm}$$

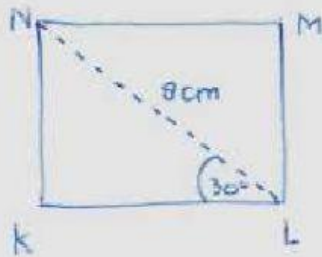
$$\frac{b}{5} = \frac{5}{5}$$

$$x = x$$

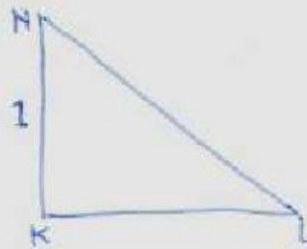
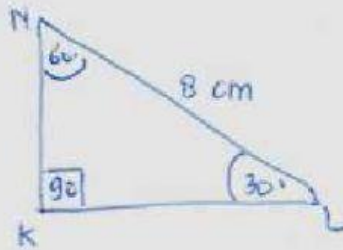
$$b = x$$

$$b = \quad \text{cm}$$

5) Tentukan luas persegi panjang berikut !



Jawab :



Perbandingan

1 : 1

$$\bullet \quad \underline{KL} = \underline{8}$$

$$\bullet \quad \underline{KN} = \underline{8}$$

$$KL \times = 8 \times$$

$$KN \times = 8 \times$$

$$KL = \frac{x}{1}$$

$$KN = \frac{x}{1}$$

$$KL = \quad \text{cm}$$

$$KN = \quad \text{cm}$$

$$\begin{aligned} \text{Jadi } L_{KLMN} &= p \times l \\ &= KL \times KN \\ &= \quad \times \\ &= \quad \text{cm}^2 \end{aligned}$$

Selamat Mengerjakan