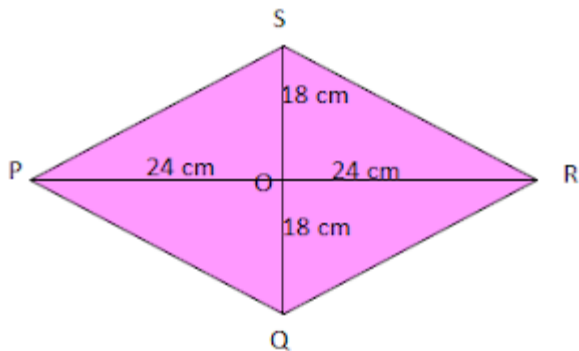


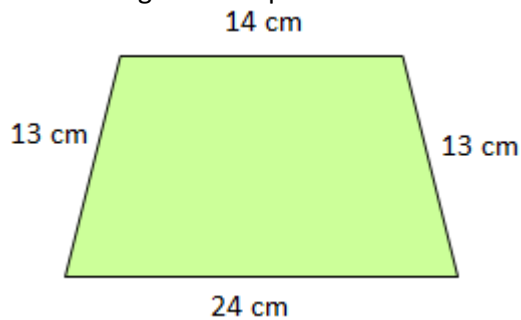
## CONTOH SOAL TEOREMA PYTHAGORAS ESSAY

### A. Jawab pertanyaan berikut ini dengan benar!

1. Panjang diagonal-diagonal suatu belah ketupat 36 cm dan 48 cm. Panjang sisi belah ketupat tersebut adalah...

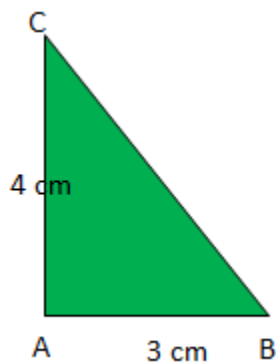


2. Perhatikan gambar trapesium sama kaki berikut!



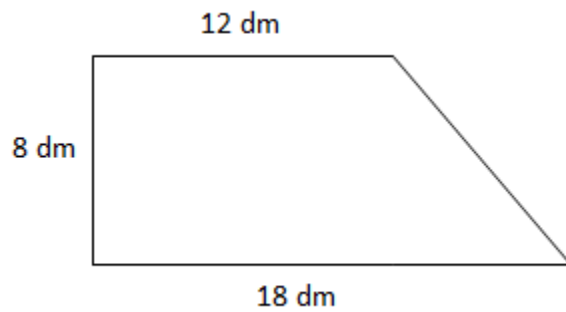
Tinggi trapesium tersebut adalah...

3. Sebuah segitiga siku-siku memiliki panjang sisi siku-siku 3 cm dan 4 cm. Keliling segitiga tersebut adalah...



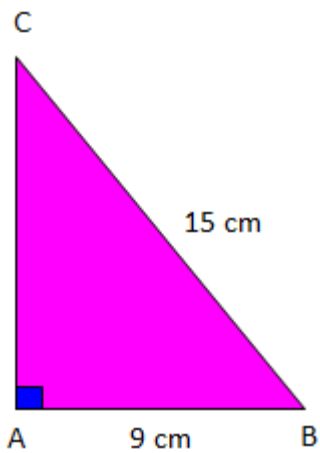
## CONTOH SOAL TEOREMA PYTHAGORAS ESSAY

4. Perhatikan trapesium berikut!



Keliling trapesium di atas adalah...

5. Perhatikan gambar berikut!

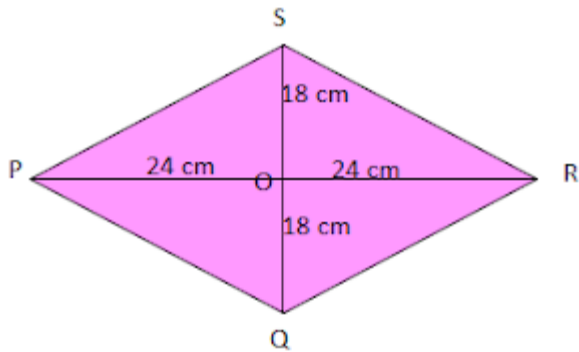


Luas segitiga ABC adalah...

## CONTOH SOAL TEOREMA PYTHAGORAS ESSAY

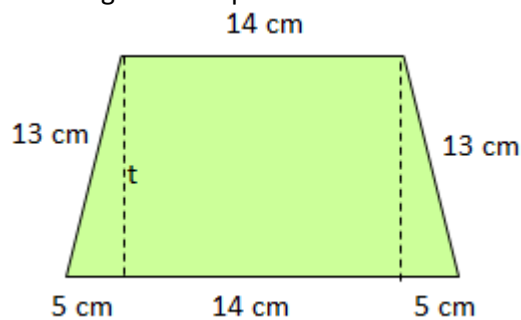
### B. Kunci jawaban soal diatas

1. Perhatikan gambar belah ketupat berikut:



$$\begin{aligned}\text{Panjang sisi belah ketupat (PQ)} &= \sqrt{PO^2 + QO^2} \\ &= \sqrt{24^2 + 18^2} \\ &= \sqrt{576 + 324} \\ &= \sqrt{900} \\ &= 30 \text{ cm}\end{aligned}$$

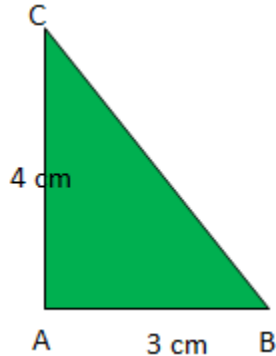
2. Perhatikan gambar trapesium berikut:



$$\begin{aligned}\text{Tinggi trapesium (t)} &= \sqrt{13^2 - 5^2} \\ &= \sqrt{169 - 25} \\ &= \sqrt{144} \\ &= 12 \text{ cm}\end{aligned}$$

## CONTOH SOAL TEOREMA PYTHAGORAS ESSAY

3. Perhatikan segitiga siku-siku di bawah ini:

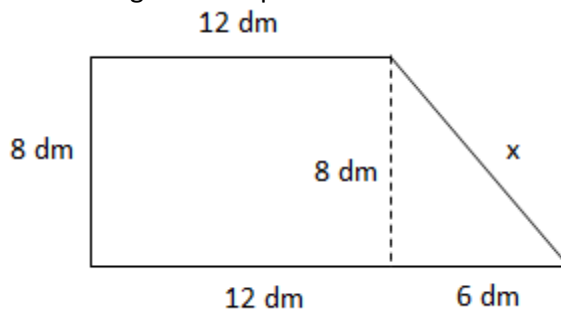


Sebelum mencari keliling, kita harus mencari panjang BC:

$$\begin{aligned}BC &= \sqrt{AB^2 + AC^2} \\&= \sqrt{3^2 + 4^2} \\&= \sqrt{9 + 16} \\&= \sqrt{25} \\&= 5 \text{ cm}\end{aligned}$$

$$\begin{aligned}\text{Keliling segitiga ABC} &= AB + BC + AC \\&= 3 + 5 + 4 \\&= 12 \text{ cm}\end{aligned}$$

4. Perhatikan gambar trapesium di bawah:



Sebelum mencari keliling bangun di atas, kita cari dulu panjang x:

$$\begin{aligned}x &= \sqrt{8^2 + 6^2} \\&= \sqrt{64 + 36} \\&= \sqrt{100} \\&= 10 \text{ dm}\end{aligned}$$

$$\text{Keliling trapesium} = 8 \text{ dm} + 18 \text{ dm} + 10 \text{ dm} + 12 \text{ dm} = 48 \text{ dm}$$

## CONTOH SOAL TEOREMA PYTHAGORAS ESSAY

5. Sebelum mencari luas, kita harus mencari tinggi (AC):

$$\begin{aligned}\text{Tinggi (AC)} &= \sqrt{BC^2 + AB^2} \\ &= \sqrt{15^2 - 9^2} \\ &= \sqrt{225 - 81} \\ &= \sqrt{144} \\ &= 12 \text{ cm}\end{aligned}$$

$$\begin{aligned}\text{Luas segitiga ABC} &= \frac{1}{2} \times \text{alas} \times \text{tinggi} \\ &= \frac{1}{2} \times AB \times AC \\ &= \frac{1}{2} \times 9 \times 12 \\ &= 54 \text{ cm}^2\end{aligned}$$