

BAB
5

Nisbah Trigonometri

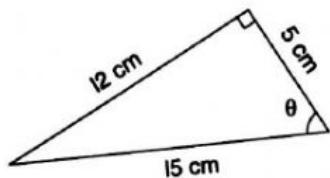
Trigonometric Ratios

5.1 Sinus, Kosinus dan Tangen bagi Sudut Tirus dalam Segi Tiga Bersudut Tegak
Sine, Cosine and Tangent of Acute Angles in Right-angled Triangles

Bahagian A
Section A

Tulis jawapan dalam ruangan yang disediakan.

1. Rajah menunjukkan sebuah segi tiga bersudut tegak. Cari nilai $\sin \theta$.
Diagram shows a right-angled triangle. Find the value of $\sin \theta$.



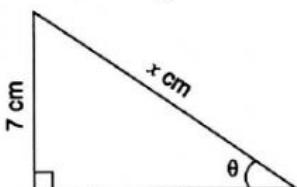
A $\frac{5}{12}$

C $\frac{5}{15}$

B $\frac{12}{15}$

D $\frac{15}{5}$

2. Diberi nilai $\sin \theta = \frac{2}{5}$, hitung panjang sisi x .
Given the value of $\sin \theta = \frac{2}{5}$, calculate the length of x .



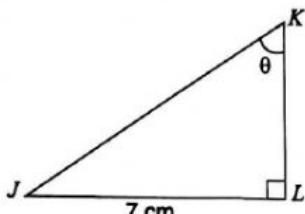
A 14 cm

B 15.5 cm

C 16 cm

D 17.5 cm

3. JKL ialah sebuah segi tiga bersudut tegak. Diberi nilai $\sin \theta = 0.27$, hitung panjang JK , dalam cm.
 JKL is a right-angled triangle. Given the value of $\sin \theta = 0.27$, calculate the length of JK , in cm.



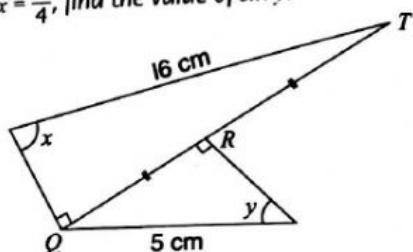
A 18.9 cm

B 25.92 cm

C 31.8 cm

D 34.28 cm

4. Dalam rajah, QRT ialah garis lurus. Diberi $QR = ST$ dan $\sin x = \frac{3}{4}$, cari nilai $\sin y$.
In diagram, QRT is a straight line. Given $QR = ST$ and $\sin x = \frac{3}{4}$, find the value of $\sin y$.



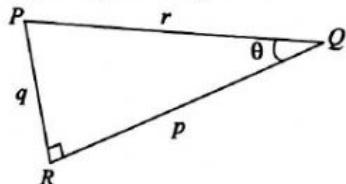
A $\frac{3}{16}$

B $\frac{5}{16}$

C $\frac{4}{5}$

D $\frac{6}{5}$

5. PQR ialah sebuah segi tiga bersudut tegak. Nyatakan nilai kos θ .
 PQR is a right-angled triangle. State the value of $\cos \theta$.



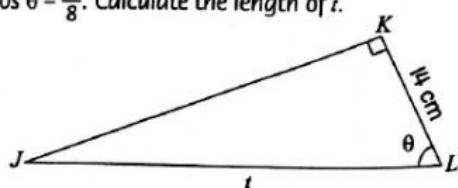
A $\frac{q}{r}$

B $\frac{p}{r}$

C $\frac{q}{p}$

D $\frac{p}{q}$

6. Dalam rajah, JKL ialah sebuah segi tiga bersudut tegak. Diberi kos $\theta = \frac{7}{8}$. Hitung nilai t .
In diagram, JKL is a right-angled triangle. Given $\cos \theta = \frac{7}{8}$. Calculate the length of t .



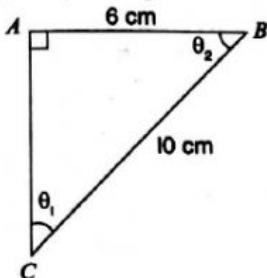
A 10 cm

B 16 cm

C 18 cm

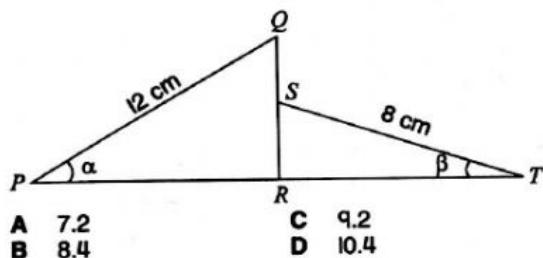
D 24 cm

7. Dalam rajah, ABC ialah sebuah segi tiga bersudut tegak. Hitung nilai $\cos \theta_1 + \cos \theta_2$.
In diagram, ABC is a right-angled triangle. Calculate the value of $\cos \theta_1 + \cos \theta_2$.



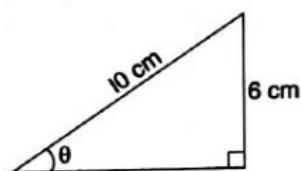
- A $\frac{7}{10}$
B $\frac{9}{10}$
C $1\frac{2}{5}$
D $1\frac{3}{10}$

8. Dalam rajah, PRT ialah garis lurus. Diberi $\cos \alpha = 0.6$ dan $\cos \beta = 0.4$. Hitung panjang PRT , dalam cm.
In diagram, PRT is a straight line. Given $\cos \alpha = 0.6$ and $\cos \beta = 0.4$. Calculate the length of PRT , in cm.



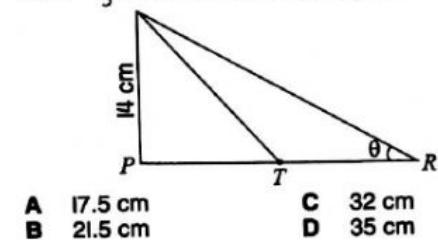
- A 7.2
B 8.4
C 9.2
D 10.4

9. Cari nilai $\tan \theta$.
Find the value of $\tan \theta$.



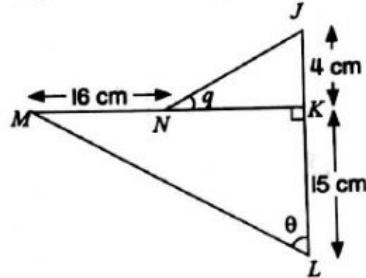
- A $\frac{3}{4}$
B $\frac{3}{5}$
C $\frac{3}{8}$
D $\frac{7}{10}$

10. Dalam rajah, T ialah titik tengah bagi garis PR . Diberi $\tan \theta = \frac{2}{5}$. Hitung panjang TR .
In diagram, T is a mid-point of line PR . Given $\tan \theta = \frac{2}{5}$. Calculate the length of TR .



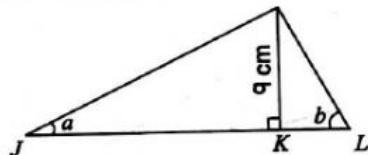
- A 17.5 cm
B 21.5 cm
C 32 cm
D 35 cm

- II. Dalam rajah, JKL dan MNK adalah dua garis lurus. Diberi $\tan q = 0.8$, hitung panjang ML , dalam cm.
In diagram, JKL and MNK are two straight lines. Given $\tan q = 0.8$, calculate the length of ML , in cm.



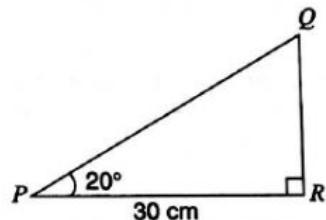
- A 12.6 cm
B 25.8 cm
C 14.3 cm
D 21.8 cm

12. Dalam rajah, JKL ialah garis lurus. Diberi $\tan a = 22.5^\circ$ dan $\tan b = 77^\circ$, hitung panjang JKL .
In diagram, JKL is a straight line. Given $\tan a = 22.5^\circ$ and $\tan b = 77^\circ$, calculate the length of JKL .



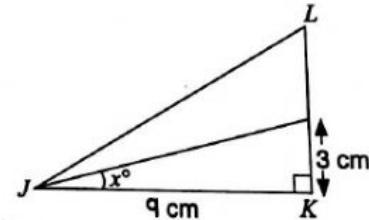
- A 18.98 cm
B 21.72 cm
C 22.68 cm
D 23.82 cm

13. PQR ialah sebuah segi tiga bersudut tegak. Diberi $\sin 20^\circ = 0.34$, $\cos 20^\circ = 0.94$ dan $\tan 20^\circ = 0.36$. Hitung panjang QR .
 PQR is a right-angled triangle. Given $\sin 20^\circ = 0.34$, $\cos 20^\circ = 0.94$ and $\tan 20^\circ = 0.36$. Calculate the length of QR .



- A 10.2 cm
B 10.8 cm
C 20.8 cm
D 28.2 cm

14. JKL ialah sebuah segi tiga bersudut tegak. Hitung panjang JL .
 JKL is a right-angled triangle. Calculate the length of JL .



- A 23 cm
B 24 cm
C 27 cm
D 30 cm