

BAB 5

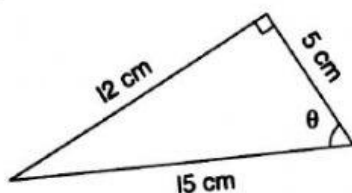
Nisbah Trigonometri Trigonometric Ratios

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

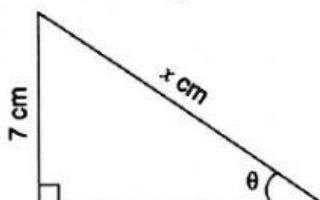
Tulis jawapan dalam ruangan yang disediakan.

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



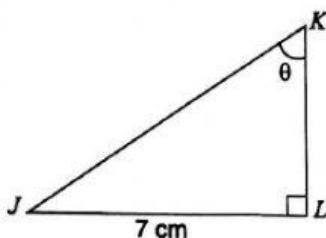
- A $\frac{5}{12}$ C $\frac{5}{15}$
B $\frac{12}{15}$ D $\frac{15}{5}$

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 C 16 cm
B 15.5 cm D 17.5 cm

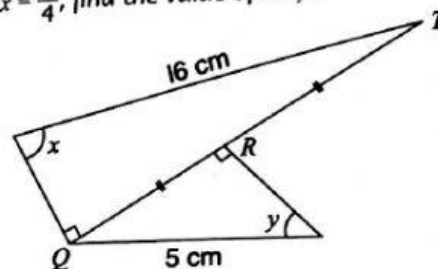
3. JKL ialah sebuah segi tiga bersudut tegak. Diberi nilai $\sin \theta = 0.27$, hitung panjang JK , dalam cm.
 JKL is a right-angled triangle. Given the value of $\sin \theta = 0.27$, calculate the length of JK , in cm.



- A 18.9 cm C 31.8 cm
B 25.92 cm D 34.28 cm

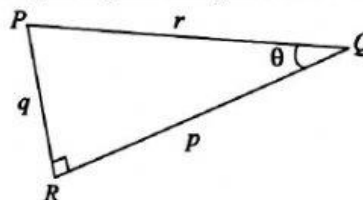
Matematik Tingkatan 3

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 $\sin y$.



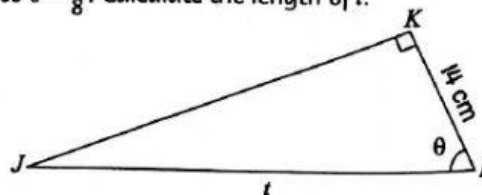
- A $\frac{3}{16}$ C $\frac{4}{5}$
B $\frac{5}{16}$ D $\frac{6}{5}$

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



- A $\frac{q}{r}$ C $\frac{q}{p}$
B $\frac{p}{r}$ D $\frac{p}{q}$

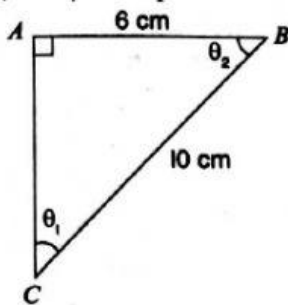
6. Dalam rajah, JKL ialah sebuah segi tiga bersudut tegak. Diberi $\cos \theta = \frac{7}{8}$. Hitung nilai t .
In diagram, JKL is a right-angled triangle. Given $\cos \theta = \frac{7}{8}$. Calculate the length of t .



- A 10 cm C 18 cm
B 16 cm D 24 cm

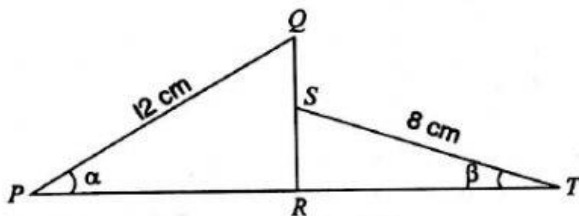
Mathematics Form 3

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 $\cos \theta_1 + \cos \theta_2$.



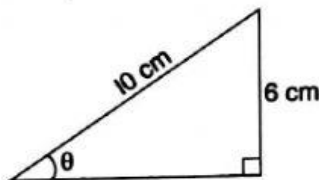
- A $\frac{7}{10}$ C $1\frac{2}{5}$
B $\frac{9}{10}$ D $1\frac{3}{10}$

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.



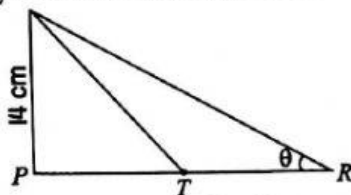
- A 7.2 C 9.2
B 8.4 D 10.4

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



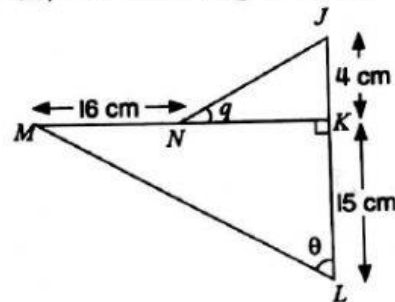
- A $\frac{3}{4}$ C $\frac{3}{8}$
B $\frac{3}{5}$ D $\frac{7}{10}$

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 .



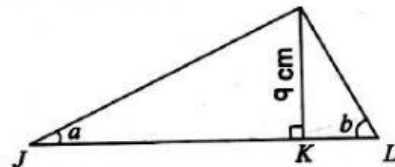
- A 17.5 cm C 32 cm
B 21.5 cm D 35 cm

11. 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.



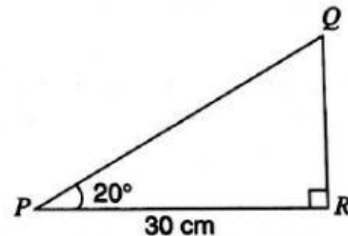
- A 12.6 cm C 14.3 cm
B 25.8 cm D 21.8 cm

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 .



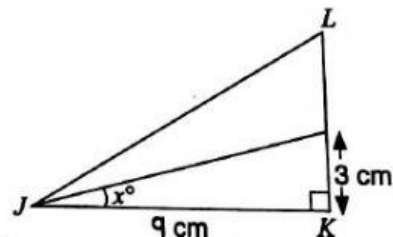
- A 18.98 cm C 22.68 cm
B 21.72 cm D 23.82 cm

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 C 20.8 cm
B 10.8 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 C 27 cm
B 24 cm D 30 cm