

Bab 5

Nisbah Trigonometri Trigonometry Ratios

BAHAGIAN / SECTION A

Arahan: Jawab semua soalan.

Instruction: Answer all questions.

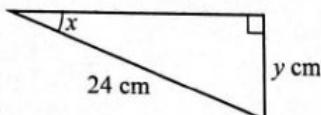
- 1 Tukarkan 32.11° kepada unit darjah dan minit.

Convert 32.11° to degrees and minutes.

- A $32^\circ 16'$
B $32^\circ 10'$
C $32^\circ 06'$
D $32^\circ 01'$

- 2 Rajah di bawah menunjukkan sebuah segi tiga bersudut tegak.

The diagram below shows a right-angled triangle.



Diberi bahawa $\sin x = \frac{3}{8}$.
Cari nilai y.

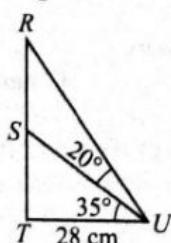
Given that $\sin x = \frac{3}{8}$.

Find the value of y.

- A 12 C 6
B 9 D 3

- 3 Rajah di bawah menunjukkan sebuah segi tiga bersudut tegak RTU.

The diagram below shows a right-angled triangle RTU.



Hitung panjang, dalam cm, RS.
Calculate the length, in cm, of RS.

- A 39.99
B 30.18
C 20.38
D 19.61

- 4 Jadual di bawah menunjukkan nilai tangen bagi beberapa sudut.

The table below shows the values of tangent of some angles.

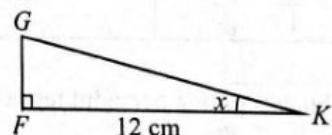
θ	30°	60°
$\tan \theta$	$\frac{1}{\sqrt{3}}$	R

Cari nilai R.
Find the value of R.

- A 1
B $\frac{1}{\sqrt{2}}$
C $\frac{\sqrt{3}}{2}$
D $\sqrt{3}$

- 5 Rajah di bawah menunjukkan sebuah segi tiga bersudut tegak GFK.

The diagram below shows a right-angled triangle GFK.



Diberi bahawa panjang $GF : FK = 1 : \frac{12}{5}$.

Cari nilai bagi $\sin x$.
Given that the length of

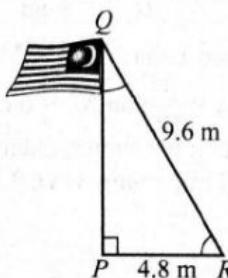
$GF : FK = 1 : \frac{12}{5}$.

Find the value of $\sin x$.

- A $\frac{12}{5}$
B $\frac{5}{12}$
C $\frac{12}{13}$
D $\frac{5}{13}$

- 6 Rajah di bawah menunjukkan sebatang tiang bendera.

The diagram below shows a flagpole.



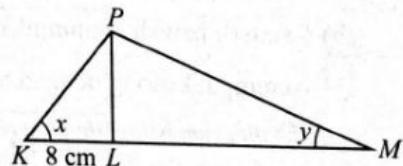
Cari nilai perimeter, dalam m, bagi rajah di atas.

Find the perimeter, in m, of the diagram above.

- A 8.3
B 14.7
C 19.5
D 22.7

- 7 Rajah di bawah menunjukkan dua segi tiga bersudut tegak PKL dan PML.

The diagram below shows two right-angled triangles PKL and PML.



Diberi bahawa $\tan x = 1\frac{1}{4}$ dan $\sin y = \frac{5}{13}$.

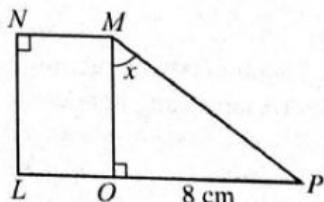
Cari panjang, dalam cm, LM.

Given that $\tan x = 1\frac{1}{4}$ and $\sin y = \frac{5}{13}$.

Find the length, in cm, of LM.

- A 26
B 24
C 10
D 9

- 8** Rajah di bawah menunjukkan sebuah trapezium $MNLP$.
5.1 The diagram below shows trapezium $MNLP$.

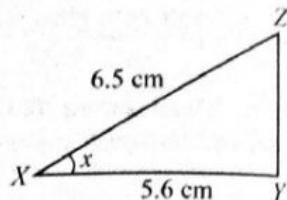


Diberi bahawa $NL = 2MN$, $\sin x = \frac{8}{10}$ dan $NL = 6\text{ cm}$. Hitung perimeter, dalam cm, bagi trapezium $MNLP$.

Given that $NL = 2MN$, $\sin x = \frac{8}{10}$ and $NL = 6\text{ cm}$. Calculate the perimeter, in cm, of the trapezium $MNLP$.

- A 26
B 28
C 30
D 32

- 9** Rajah di sebelah menunjukkan sebuah segi tiga bersudut tegak XYZ .
5.1 The diagram below shows a right-angled triangle XYZ .



Nyatakan nilai YZ dan nilai x .
State the values of YZ and x .

- A $YZ = 3.1\text{ cm}$
 $x = 30.21^\circ$
B $YZ = 3.2\text{ cm}$
 $x = 30.41^\circ$
C $YZ = 3.3\text{ cm}$
 $x = 30.51^\circ$
D $YZ = 3.4\text{ cm}$
 $x = 30.71^\circ$

BAHAGIAN / SECTION B

Arahan: Jawab semua soalan.
Instruction: Answer all questions.

- 10 (a)** Lengkapkan jadual di bawah dengan jawapan yang betul.



Complete the table below with the correct answers.

[2 markah/marks]

Jawapan/Answer:

$\tan \theta$	$\sin \theta$	$\cos/\cos \theta$
$\frac{3}{4}$	$\frac{3}{5}$	
	$\frac{8}{17}$	$\frac{15}{17}$

- (b)** Rajah di bawah menunjukkan sebuah segi tiga bersudut tegak ABC . Diberi bahawa $\cos \theta = \frac{5}{13}$.



Isi tempat kosong dengan nilai panjang bagi AB dan BC yang betul berdasarkan jawapan yang diberi.

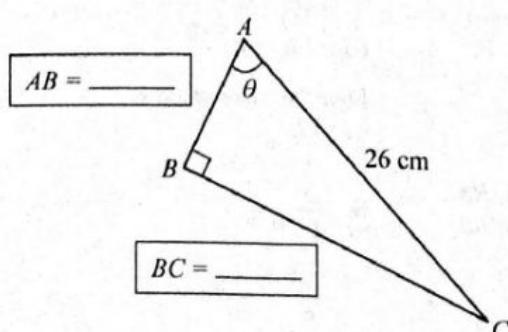
The diagram below shows a right-angled triangle ABC . Given that $\cos \theta = \frac{5}{13}$.

Fill in the blanks with the correct values of length AB and BC based on the given answers.

[2 markah/marks]

Jawapan/Answer:

5 cm
10 cm
12 cm
13 cm
24 cm



11 (a) Isi tempat kosong di bawah dengan jawapan yang betul.

5.1 Fill in the blanks below with the correct answers.

sisi bertentangan
opposite side

90°

hipotenusa
hypotenuse

180°

sisi bersebelahan
adjacent side

[2 markah/marks]

Jawapan/Answer:

Sisi terpanjang bagi satu segi tiga bersudut tegak ialah _____.

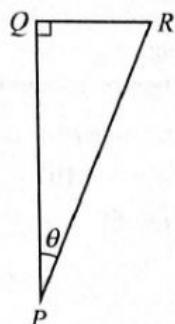
The longest side of a right-angled triangle is _____.

Segi tiga bersudut tegak mempunyai satu sudut _____.

Right-angled triangle has one angle of _____.

(b) Padankan soalan di bawah berdasarkan rajah segi tiga bersudut tepat PQR .

5.1 Match the questions below based on the right-angled triangle PQR .



[2 markah/marks]

Jawapan/Answer:

Nama sisi QP	
Name of side QP	

$\sin \theta$	
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Hipotenusa Hypotenuse
$\frac{QR}{RP}$
$\frac{QR}{QP}$
Sisi bersebelahan Adjacent side

Tandakan (\checkmark) bagi pernyataan yang betul dan (\times) jika sebaliknya.
Mark (\checkmark) for the correct statement and (\times) if otherwise.

[4 markah/marks]

Jawapan/Answer:

(a)	$\sin r = \frac{12}{16}$	
(b)	$\tan u = \frac{20}{21}$	

(c)	$\cos/\cos t = \frac{20}{29}$	
(d)	$\cos/\cos s = \frac{16}{20}$	

BAHAGIAN / SECTION C

Arahan: Jawab semua soalan.

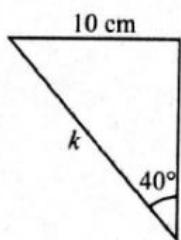
Instruction: Answer all questions.

13 (a) Cari nilai k bagi setiap yang berikut.



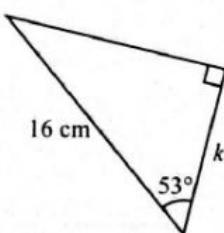
Jawapan/Answer:

(i)



$$k = \underline{\hspace{2cm}}$$

(ii)



$$k = \underline{\hspace{2cm}}$$

[2 markah/marks]