

## ULANGKAJI TINGKATAN 5

### BAB 6 : NISBAH DAN GRAF FUNGSI TRIGONOMETRI

NAMA GURU: \_\_\_\_\_

SUBJEK: MATEMATIK

NAMA PELAJAR: \_\_\_\_\_

KELAS: \_\_\_\_\_

#### SOALAN 1

Antara berikut, yang manakah sudut rujukan sepadan bagi  $315^\circ 24'$ ?

Which of the following is the corresponding reference angle of  $315^\circ 24'$ ?

A  $42^\circ 36'$

C  $44^\circ 36'$

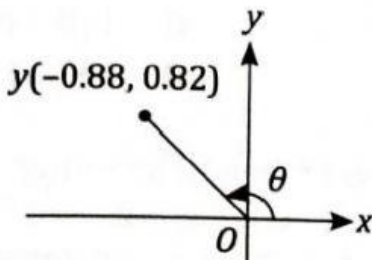
B  $43^\circ 34'$

D  $45^\circ 24'$

#### SOALAN 2

Rajah berikut menunjukkan koordinat titik P pada suatu satah Cartes.

The following diagram shows the coordinates of point P on a Cartesian plane.



Cari nilai  $\theta$ .

Find the value of  $\theta$ .

A  $215^\circ 18'$

C  $243^\circ 41'$

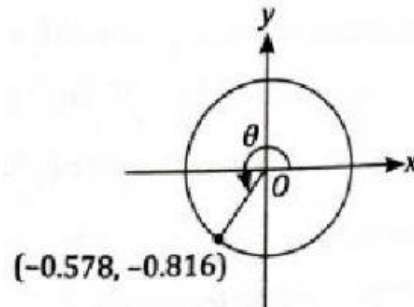
B  $234^\circ 41'$

D  $251^\circ 18'$

#### SOALAN 3

Rajah berikut menunjukkan satu bulatan unit dengan sudut  $\theta$ .

The following diagram shows a unit circle with angle  $\theta$ .



Cari nilai  $\theta$ .

Find the value of  $\theta$ .

A  $215^\circ 18'$

C  $243^\circ 41'$

B  $234^\circ 41'$

D  $251^\circ 18'$

#### SOALAN 4

Apakah nilai bagi kos  $216.8^\circ$  berdasarkan sudut rujukan sepadan?

What is the value of  $\cos 216.8^\circ$  based on the corresponding reference angle?

A -0.8007

C 0.7880

B -0.7880

D 0.8007

### SOALAN 5

Diberi bahawa  $\cos \theta = \frac{\sqrt{3}}{2}$  cari nilai bagi  $\tan \theta$  tanpa menggunakan kalkulator saintifik.

*Given that  $\cos \theta = \frac{\sqrt{3}}{2}$  find the value of  $\tan \theta$  without using a scientific calculator.*

A  $\sqrt{3}$

C  $\frac{1}{\sqrt{3}}$

B  $\frac{1}{\sqrt{2}}$

D  $\frac{1}{2}$

### SOALAN 6

Diberi bahawa  $\tan \theta = 0.6240$  dan  $0^\circ < \theta \leq 360^\circ$ .

Cari sudut  $\theta$ .

*Given that  $\tan \theta = 0.6240$  and  $0^\circ \leq \theta \leq 360^\circ$ .*

*Find the angle of  $\theta$*

A  $31^\circ 57'$  dan/ and  $148^\circ 3'$

B  $31^\circ 57'$  dan/ and  $211^\circ 57'$

C  $31^\circ 57'$  dan/ and  $328^\circ 3'$

D  $37^\circ 36'$  dan/ and  $218^\circ 37'$

### SOALAN 7

Diberi  $\cos \theta = -0.9265$  dan  $0^\circ \leq \theta \leq 360^\circ$ .

Cari sudut  $\theta$ .

*Given  $\cos \theta = -0.9265$  and  $0 \leq \theta \leq 360^\circ$ .*

*Find the angle of  $\theta$ .*

A  $22^\circ 6'$  dan/ and  $157^\circ 54'$

B  $22^\circ 6'$  dan/ and  $337^\circ 54'$

C  $157^\circ 54'$  dan/ and  $202^\circ 6'$

D  $202^\circ 6'$  dan/ and  $337^\circ 54'$

### SOALAN 8

Diberi bahawa  $\sin x = -\sin 50^\circ$  dengan keadaan

$0^\circ \leq \theta \leq 360^\circ$ . Tentukan nilai bagi  $x$ .

*Given that  $\sin x = -\sin 50^\circ$  such that  $0^\circ \leq \theta \leq 360^\circ$ .  
Determine the value of  $x$ .*

A  $130^\circ$  dan/ and  $230^\circ$

B  $130^\circ$  dan/ and  $310^\circ$

C  $220^\circ$  dan/ and  $320^\circ$

D  $230^\circ$  dan/ and  $310^\circ$

### SOALAN 9

Diberi bahawa  $\cos t = \sin 150^\circ$  dengan keadaan

$0^\circ \leq t \leq 360^\circ$ . Cari nilai  $t$ .

*Given that  $\cos t = \sin 150^\circ$  such that  $0^\circ < t \leq 360^\circ$ .*

*Find the value of  $t$ .*

A  $60^\circ$  dan/ and  $300^\circ$

B  $120^\circ$  dan/ and  $240^\circ$

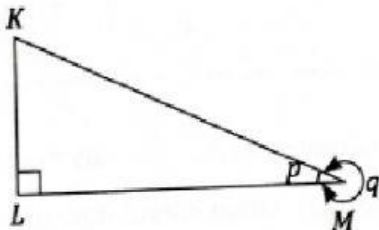
C  $120^\circ$  dan/ and  $300^\circ$

D  $240^\circ$  dan/ and  $300^\circ$

### SOALAN 10

Rajah berikut menunjukkan sebuah segi tiga bersudut tegak KLM.

The following diagram shows a right-angled triangle KLM.



Diberi bahawa  $\sin p = \frac{5}{13}$  cari nilai bagi  $\tan q$ .

Given that  $\sin p = \frac{5}{13}$  find the value of  $\tan q$ .

A  $-\frac{5}{12}$

C  $-\frac{5}{13}$

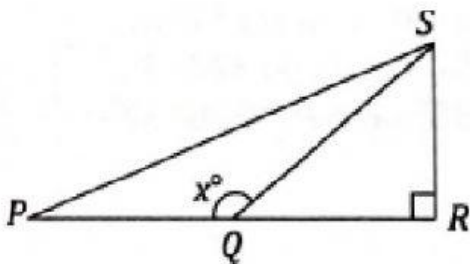
B  $-\frac{12}{13}$

D  $-\frac{12}{5}$

### SOALAN 11

Rajah berikut menunjukkan sebuah segi tiga bersudut tegak PRS. PQR ialah satu garis lurus dan Q ialah titik tengah bagi PR.

The following diagram shows a right-angled triangle PRS. PQR is a straight line and Q is the midpoint of PR.



Diberi  $SR = 5$  cm dan  $PS = 13$  cm, cari nilai bagi  $\tan x$ .  
Given  $SR = 5$  cm and  $PS = 13$  cm, find the value of  $\tan x$ .

A  $-\frac{5}{6}$

C  $\frac{5}{13}$

B  $-\frac{5}{13}$

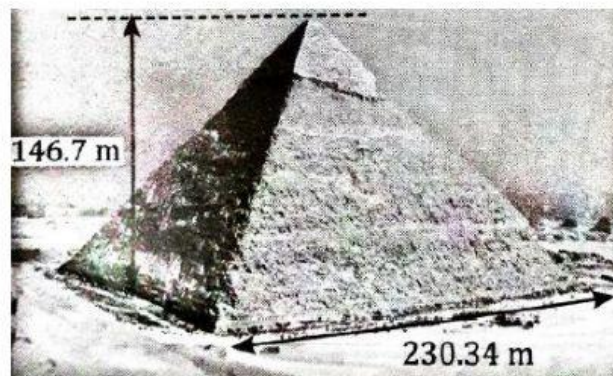
D  $\frac{5}{6}$



### SOALAN 12

Rajah berikut menunjukkan Piramid Agung Giza.

The following diagram shows the Great Pyramid of Giza.



Hitung sudut antara permukaan piramid ke tanah rata di luar piramid.

Calculate the angle between the surface of the pyramid to the flat ground outside the pyramid.

A  $32.49^\circ$

C  $128.13^\circ$

B  $51.87^\circ$

D  $147.51^\circ$

