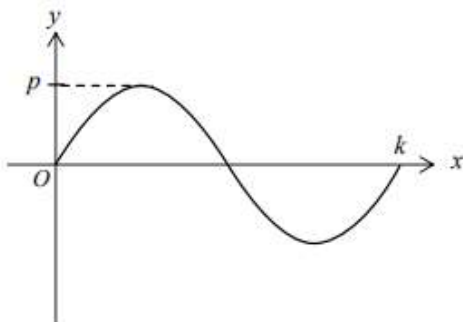


- (a) Rajah 7 menunjukkan graf bagi $y = 2 \sin x$.

Diagram 7 shows a graph of $y = 2 \sin x$.



Rajah 7
Diagram 7

- (i) Cari nilai p dan nilai k .

Find the values of p and k .

- (ii) Nyatakan nilai minimum bagi graf itu.

State the minimum value of the graph.

Jawapan / Answer:

(a) (i) $p = \dots\dots\dots$

$k = \dots\dots\dots$

(ii)

- (b) (i)

x	0°	45°	90°	180°	225°	270°	360°
y	3		1		-0.41	1	3

Jadual 3
Table 3

- (ii) Rujuk graf di halaman 28.

Refer graph on page 28.

(iii)

- (b) (i) Lengkapkan Jadual 3 di ruang jawapan bagi fungsi $y = 2 \cos x + 1$.

Complete Table 3 in the answer space for the function $y = 2 \cos x + 1$.

- (ii) Berdasarkan Jadual 3, lukis graf fungsi $y = 2 \cos x + 1$ bagi $0^\circ \leq x \leq 360^\circ$.

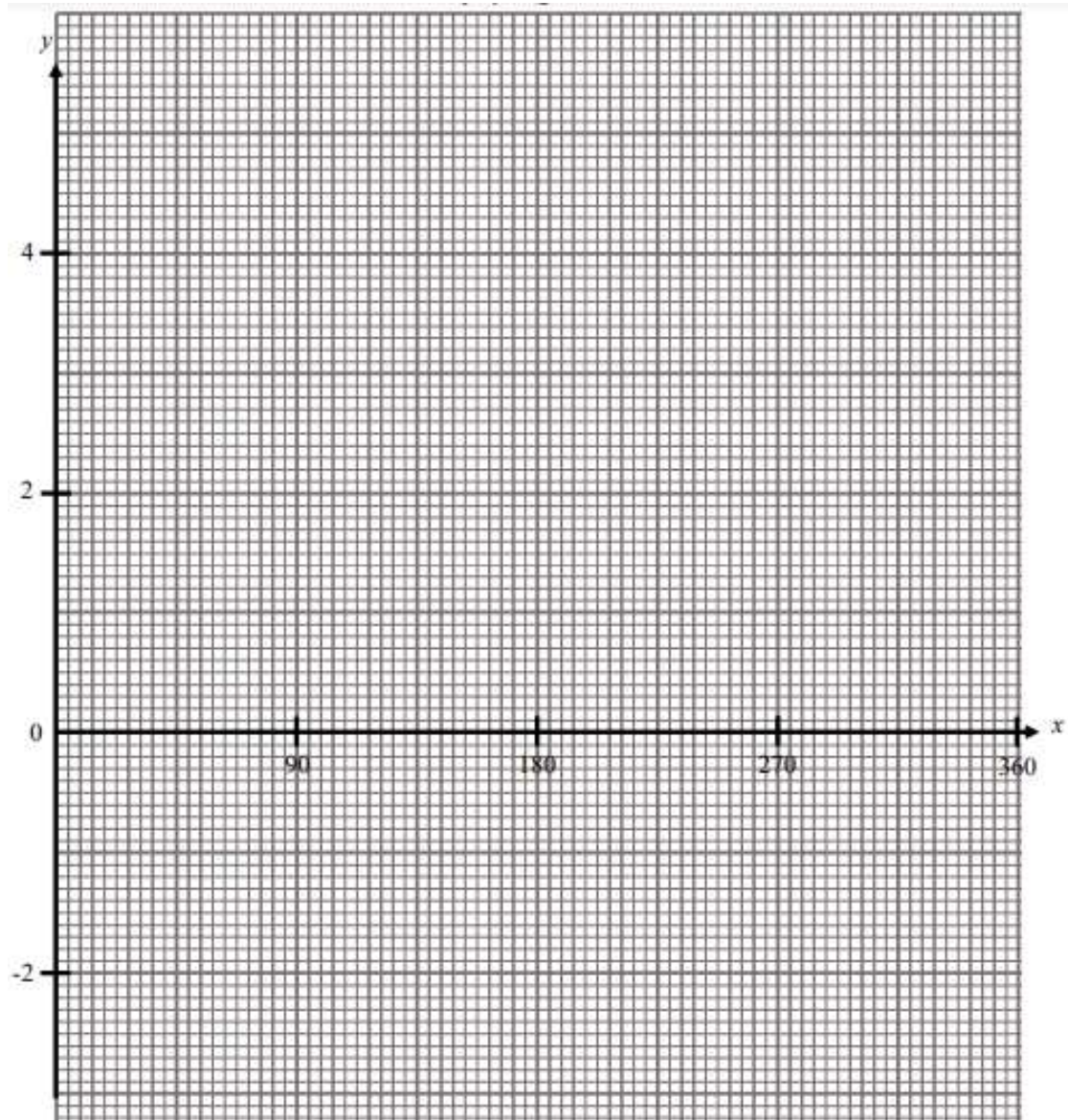
Based on Table 3, draw a graph of the function $y = 2 \cos x + 1$ for $0^\circ \leq x \leq 360^\circ$.

- (iii) Cari nilai x apabila $y = 2$ bagi $0^\circ \leq x \leq 180^\circ$.

Find the value of x when $y = 2$ for $0^\circ \leq x \leq 180^\circ$.

[6 markah]

[6 marks]



KEDAH

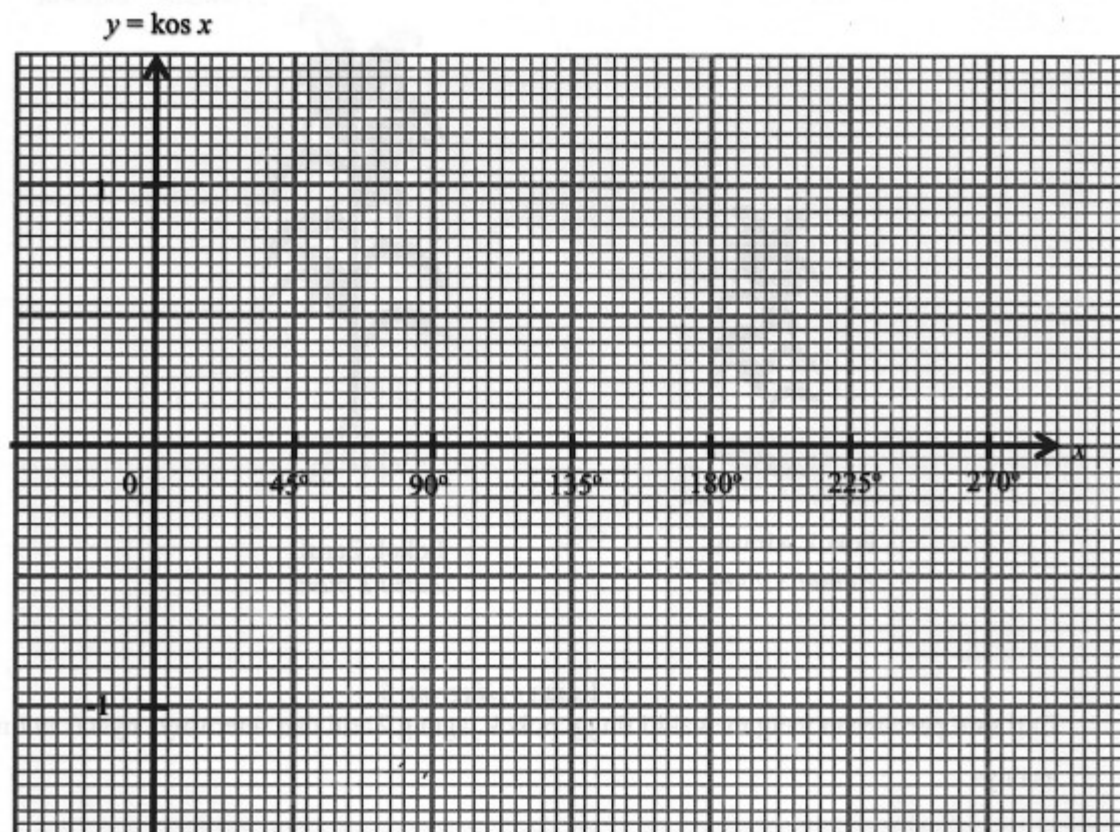
Lengkapkan Jadual 5 berikut dan seterusnya lukis graf $y = \cos x$ bagi $0^\circ \leq x \leq 270^\circ$.

Complete the following Table 5 and draw the graph of $y = \cos x$ for $0^\circ \leq x \leq 270^\circ$.

x	0°	45°	90°	135°	180°	225°	270°
$y = \cos x$	1	0.71	0	-0.71		-0.71	0

Jadual / Table 5

Jawapan / Answer:



BENTONG, PAHANG

Dalam satu eksperimen yang dijalankan di makmal, suatu zarah X dilihat bergerak seragam secara menegak dalam bentuk bulatan. Jadual 1 di bawah menunjukkan ketinggian zarah tersebut dari permukaan tanah mengufuk semasa ianya bergerak.

In an experiment conducted in the laboratory, a particle X was seen moving uniformly vertically in a circle. Table 1 below shows the height of the particle from the horizontal ground surface as it moves.

Masa / Time (s)	0	5	10	15	20
Tinggi / Height (cm)	19	30	19	8	19

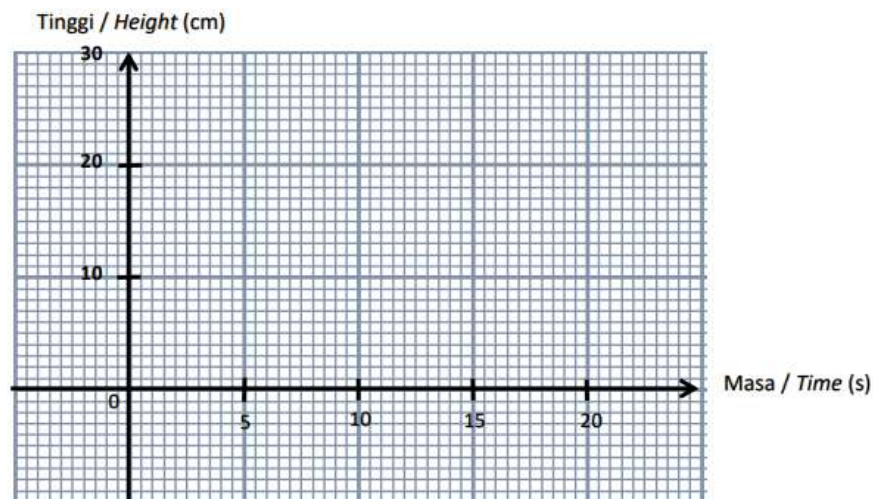
Jadual 1/ Table 1

Plot dan lukis graf di ruang jawapan berdasarkan jadual di atas dan tentukan jenis fungsi trigonometri yang boleh mewakili pergerakan zarah X . Seterusnya, nyatakan amplitud bagi graf fungsi trigonometri tersebut.

Plot and draw a graph in the answer space based on the table above and determine the type of trigonometric function that can represent the motion of particle X . Then, state the amplitude of the trigonometric function graph.

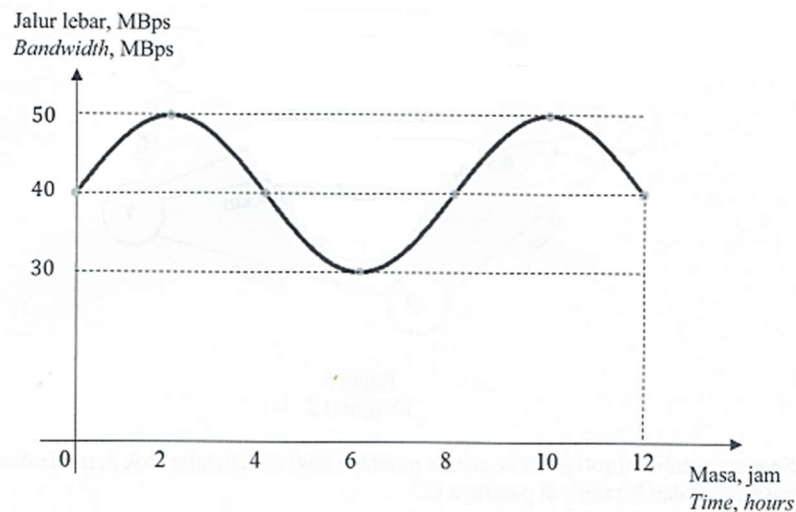
[4 markah / 4 marks]

Jawapan / Answer:



Rajah 2 menunjukkan graf kelajuan jalur lebar melawan masa yang dibekalkan oleh syarikat JMM Communications.

Diagram 2 shows the graph of the bandwidth speed against time provided by JMM Communications company.



Rajah 2
Diagram 2

Jika y mewakili jalur lebar dan x mewakili masa, gunakan fungsi dalam bentuk $y = a \sin bx + c$ untuk memodelkan jalur lebar seperti yang ditunjukkan seperti graf tersebut.

If y represents the bandwidth and x represents the time, use the function in the form of $y = a \sin bx + c$ to model the bandwidth shown as the graph.

[4 markah]

[4 marks]

Jawapan / Answer :

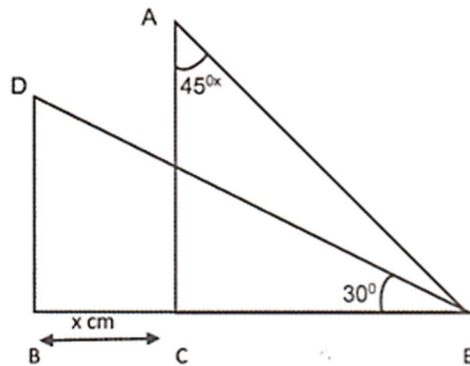
KELANTAN

Rajah 4 menunjukkan dua segitiga bersudut tegak, ACE dan DBE. BCE ialah garis lurus dan

$AE = DE = 8$ cm. Hitung nilai x

Figure 4 shows two right angled-triangles, ACE and DBE. BCE is a straight line and $AE = DE$

$= 8$ cm. Calculate the value of x



Rajah 4 / Diagram 4.

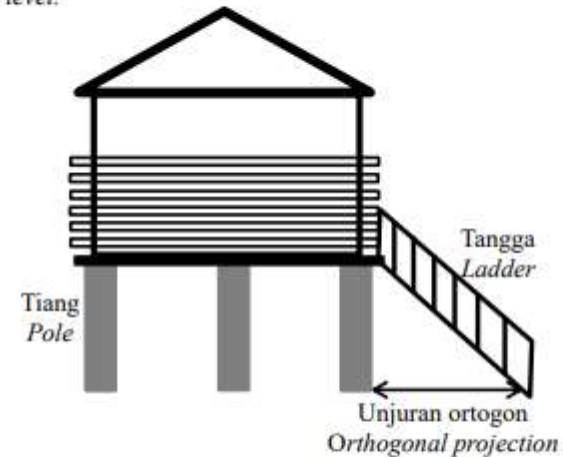
[4 markah/ marks]

Jawapan / Answer :

KUANTAN, PAHANG

(c) Rajah 10.2 menunjukkan lakaran kandang kambing yang akan dibina oleh Kamal. Tinggi tiang ialah 2 meter. Dia ingin membina tangga kandang itu dengan sudut 45° dari aras tanah.

Diagram 10.2 shows the sketch of goat shelter that will be built by Kamal. The height of the pole is 2 meters. He wants to build the ladder with an angle of 45° from the ground level.



Rajah 10.2 / Diagram 10.2

- Hitung panjang, dalam m, tangga itu. Berikan jawapan betul kepada 2 tempat perpuluhan.
Calculate the length, in m, of the ladder. State the answer correct in 2 decimal places.
- Nyatakan panjang, dalam m, unjuran ortogon tangga itu.
State the length, in m, of the orthogonal projection of the ladder.

[3 markah /marks]

SBP

Lakarkan graf $y = \sin 2x$ bagi $0^\circ \leq x \leq 360^\circ$ di dalam ruangan jawapan.

Sketch the graph $y = \sin 2x$ for $0^\circ \leq x \leq 360^\circ$ in the answer space.

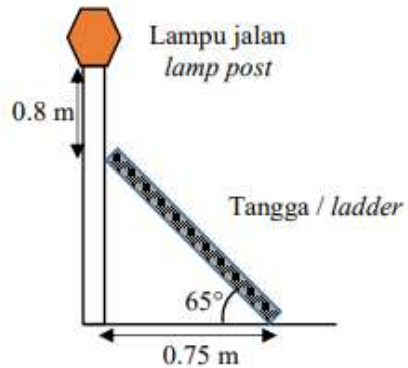
[3 markah]

[3 marks]

SABAH

Seorang juruteknik perlu memanjat tangga untuk memperbaiki lampu jalan seperti ditunjukkan pada Rajah 2.

A technician needs to climb a ladder to repair a street lamp as shown in Diagram 2.



Rajah / Diagram 2

Tentukan panjang, dalam m, tangga itu dan seterusnya cari tinggi, dalam m, tiang lampu itu

Determine the length, in m of a ladder and hence, find the height, in m, the lamp post.

[4 markah / marks]

Jawapan / Answer :