

TOPIK : GARIS DAN SATAH DALAM 3 MATRA

1. Diagram 1 shows a cuboid. M is the midpoint of DC.

Rajah 2 menunjukkan sebuah kuboid. M ialah titik tengah bagi DC.

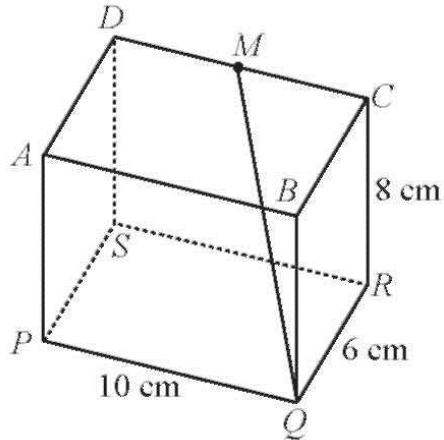


Diagram 1 / Rajah 1

- a. Name the angle between the line MQ and the plane BCRQ.

Namakan sudut di antara garis MQ dan satah BCRQ.

- b. Calculate the angle between the line MQ and the plane BCRQ.

Hitungkan sudut antara garis MQ dengan satah BCRQ.

[3 marks / 3 markah]

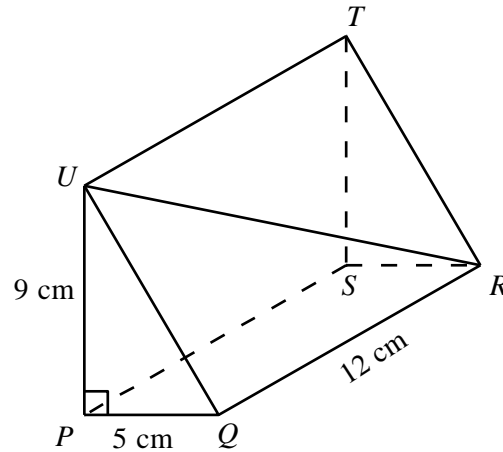
Answer/Jawapan:

(a)

(b)

2. Diagram shows a right prism. The base PQRS is a horizontal rectangle. The right-angled triangle UPQ is the uniform cross section of the prism.

Rajah menunjukkan sebuah prisma tegak. Tapak PQRS ialah sebuah segi empat tepat yang mengufuk. Segi tiga bersudut tegak UPQ ialah keratan rentas seragam prisma itu.



Identify and calculate the angle between the line RU and the base PQRS .

Kenal pasti dan hitungkan sudut di antara garis RU dengan tapak PQRS.

[3 marks / 3 markah]

Answer/Jawapan:

3. Diagram 3 shows a right prism with an isosceles triangle base, STU. The isosceles triangle STU is the uniform cross-section of the prism.

Rajah 3 menunjukkan sebuah prisma tegak dengan tapak segitiga sama kaki. Segitiga sama kaki STU merupakan keratan rentas prisma itu.

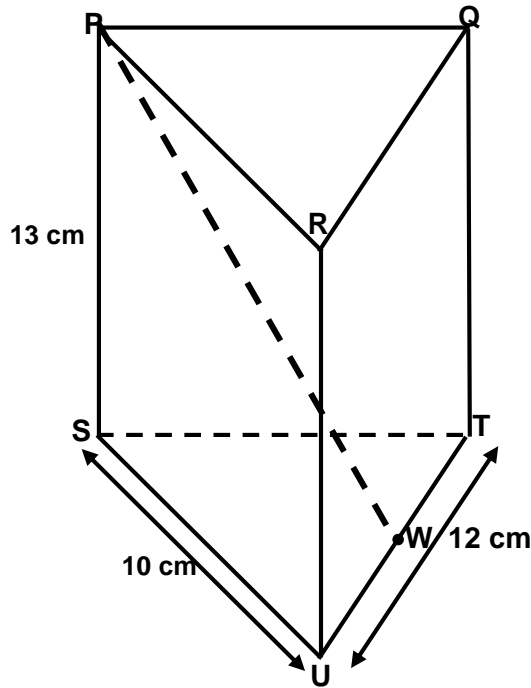


Diagram 3 / Rajah 3

$ST = SU$ and W is the midpoint of TU .
Calculate the angle between the line PW and the base STU .

*$ST = SU$ dan W ialah titik tengah TU .
Hitung sudut antara garis PW dan tapak STU .*

[3 marks/ 3 markah]

Answer/ Jawapan:

4. Diagram 4 shows a right prism. Right-angled triangles ABC and DEF are the uniform cross sections of the prism.

Rajah 4 menunjukkan sebuah prisma tegak. Segi tiga bersudut tegak ABC dan DEF adalah keratan rentas seragam prisma itu.

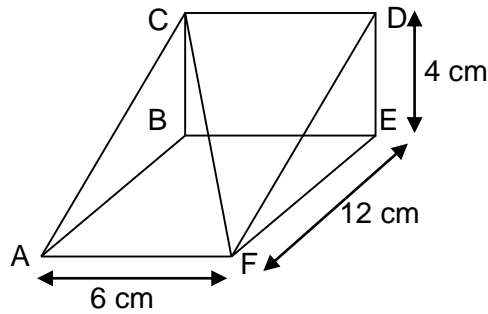


Diagram 4 / Rajah 4

- (a) Identify the angle between the line FC and the plane BCDE.
Kenalpasti sudut di antara garis FC dan BCDE.
- (b) Calculate the angle between the line FC and the plane BCDE.
Hitung sudut tersebut di antara garis FC dan BCDE.

[3 marks/ 3 markah]

Answer/ Jawapan:

(a)

(b)

5. Diagram 5 shows a cube which has sides of length 20 cm. M and N is the midpoints of AE and BF respectively.

Rajah 5 menunjukkan sebuah kubus dengan panjang sisi 20 cm. M dan N ialah titik tengah AE dan BF masing-masing.

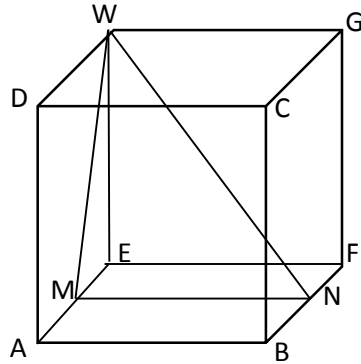


Diagram 5 / Rajah 5

- (a) Name the angle between the plane MNW and the plane ABFE.

Namakan sudut di antara satah MNW dan ABFE.

- (b) Calculate the angle between the plane MNW and the plane ABFE.

Hitung sudut di antara satah MNW dan ABFE

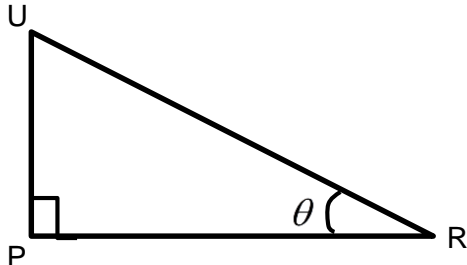
[3 marks/ 3 markah]

Answer/ Jawapan:

(a)

(b)

TOPIK : GARIS DAN SATAH DALAM 3 MATRA – Kertas 2

1.	a.	$\angle MQC$ or $\angle CQM$	1	3
	b.	$\tan \angle MQC = \frac{5}{10}$ 26.57° or $26^\circ 34'$	1 1	
2.		$\angle URP$ atau $\angle PRU$  $\tan \angle URP = \frac{9}{13}$ $\angle URP = 34.70^\circ$ atau $34^\circ 42'$	1 1 1	3
3.		$\angle PWS$ $\tan \vartheta = \frac{13}{8}$ $\vartheta = 58.39^\circ$	1 1 1	3
4	(a)	$\angle FCE$	1	3
	(b)	$\tan \vartheta = \frac{12}{7.21}$	1	
		59°	1	

5	(a) $\angle WME$ (b) $\tan \theta = \frac{20}{10}$ 63.43°	1 1 1	3
---	--	---------------------	---