

REVISION 1 (Section B and C questions)

Answer **all** questions

Jawab **semua** soalan

1

(a) Given $c = 4d + b^2$

Diberi $c = 4d + b^2$.

(i) Express d in terms of c and b .

[2 marks]

Ungkapkan d dalam sebutan c dan b .

[2 markah]

Answer / Jawapan

$$=$$

$$d = \frac{\quad}{\quad}$$

(ii) Hence, find the value of d if $c = 4$ and $b = -6$.

[2 marks]

Seterusnya, cari nilai d jika $c = 4$ dan $b = -6$

[2 markah]

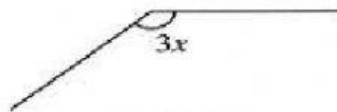
Answer / Jawapan

$$d = \frac{\quad}{\quad}$$

$$=$$

(c) Diagram 1.1 below shows a frame.

Rajah 1.1 di bawah menunjukkan sebuah bingkai.



Rajah 1.1

When four frames are combined, a regular polygon is produced. Find the value of x .

Apabila empat buah bingkai dicantum bersama, sebuah poligon sekata dihasilkan. Cari nilai x .

Answer / Jawapan

[3 marks]
[3 markah]

Interior angle = () $\times$ =

=

x =

2. (a) (i) Expand.
Kembangkan
 $-5(3 - y)$
Answer / Jawapan

[1 mark]
[1 markah]

- (ii) Factorise completely $x^3 - xy^2$.
Faktorkan $x^3 - xy^2$ selengkapnya.
Answer / Jawapan

[2 marks]
[2 markah]

(² ²)

() ()

- (b) Diagram 2.1 shows a pyramid with a square base.
Rajah 2.1 menunjukkan sebuah piramid bertapak segi empat sama.

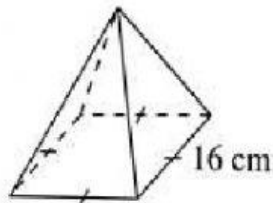


Diagram 2.1
Rajah 2.1

The height of the pyramid is 6 cm. Calculate the total surface area, in cm^2 , of the pyramid.
Tinggi piramid itu ialah 6 cm. Hitung jumlah luas permukaan, dalam cm^2 , piramid itu.

Answer / Jawapan

[3 marks]
[3 markah]

× × × ——— × ×

=

- 3 On the answer space, click at the subjects of the formulae.

[3 marks]
[3 markah]

Pada ruang jawapan, klik pada perkara rumus.

Answer / Jawapan

a) $F = ma$

F	m	a
-----	-----	-----

b) $u = v - at$

u	v	a	t
-----	-----	-----	-----

c) $2\pi\sqrt{\frac{1}{g}} = T$

π	g	T
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- 4 (a) Diagram 4.1 shows a combination of polygons.
Rajah 4.1 menunjukkan satu kombinasi poligon.

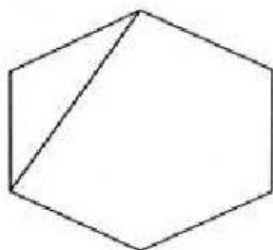


Diagram 4.1

Rajah 4.1

Name the three polygons shown in the Diagram 4.1.

[3 marks]
[3 markah]

Namakan tiga buah poligon yang ditunjukkan dalam Rajah 4.1.

Answer / Jawapan

(i) _____

(ii) _____

(iii) _____

- (b) Diagram 4.2 shows a capsule of pain resistant pill with cylinder-shaped and hemisphere-shaped at both ends.

Rajah 4.2 menunjukkan pil tahan sakit berbentuk silinder dengan kedua-dua hujungnya berbentuk hemisfera.

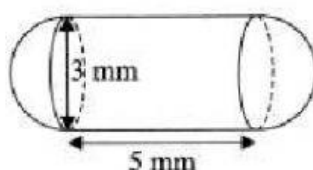


Diagram 4.2

Rajah 4.2

- (i) Find the volume of the pill capsule.

[3 marks]

Cari isipadu kapsul tersebut.

[3 markah]

[Use / Guna $\pi = \frac{22}{7}$]

Answer / Jawapan

Volume of sphere = _____ $\times$ _____ $\times$ 3

=

Volume of cylinder = _____ $\times$ _____ $\times$ 2 $\times$

Volume of pill = _____ =

- (ii) If one patient's pain resistant dose is 99 mm^3 , how many pills should be taken by the patient in one time?

Jika satu dos tahan sakit bagi seorang pesakit ialah 99 mm^3 , berapa biji pil perlu diambil oleh pesakit dalam satu masa?

Answer / Jawapan

[1 mark]

[1 markah]

Number of pill = _____ =

- 5 (a) Match the following parts of a circle with its correct properties. [3 marks]
 Padankan bahagian bulatan berikut dengan sifat nya yang betul. [3 markah]
 Answer / Jawapan

Circumference <i>Lilitan bulatan</i>	Straight line that touching the circumference and passes through the centre of circle <i>Garis lurus yang menyentuh lilitan dan melalui pusat bulatan</i>
Diameter <i>Diameter</i>	Region that bounded by an arc and a chord <i>Rantau yang dibatasi oleh satu lengkok dan satu perentas</i>
Segment <i>Tembereng</i>	Perimeter of a circle <i>Perimeter sebuah bulatan</i>

- (b) Diagram 5.1 shows a sphere and a cylinder which have a same diameter.
 Rajah 5.1 menunjukkan sebuah sfera dan sebuah silinder yang mempunyai diameter yang sama.

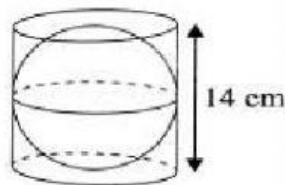


Diagram 5.1
 Rajah 5.1

Calculate
 Hitung

- (i) surface area of sphere
luas permukaan sfera
 (ii) surface area of cylindrical curved.
Luas permukaan melengkung silinder

Answer / Jawapan

i) surface area of sphere = $\pi \times \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \times 2$
 =

[3 marks]
 [3 markah]

ii) surface area of cylindrical curved.

$$= \quad \times \quad \times \quad \times$$

6 (a) Simplify:

Permudahkan:

$$\frac{15xy}{x+3} \times \frac{x^2-9}{3y}$$

Answer / Jawapan

$$\frac{\quad}{\quad} \times \frac{(\quad)(\quad)}{\quad}$$

[3 marks]
[3 markah]

$$= (\quad)$$

(b) A seminar hall in the shape of a regular polygon will be built next to the foyer as shown in Diagram 6.1.

Satu dewan seminar berbentuk polygon sekata akan di bina berdekatan dengan ruang legar seperti yang ditunjukkan di dalam Rajah 6.1

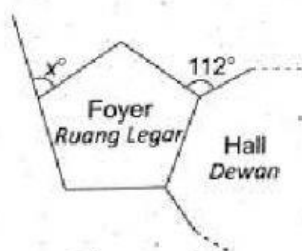


Diagram 6.1
Rajah 6.1

Calculate

Hitung

- (i) The value of x .
Nilai x
- (ii) the number of sides of the hall.
Bilangan sisi dewan tersebut.

Answer / Jawapan

[4 marks]
[4 markah]

$$x = \quad =$$

$$=$$

$$\text{number of side} = \quad =$$

- 7 (a) In the answer space, mark (✓) for the correct statement and (✗) for the incorrect answer.
 Pada ruang jawapan, tandakan (✓) pada pernyataan yang betul dan (✗) pada pernyataan yang salah.

Answer / Jawapan

[3 marks]
 [3 markah]

(i)	Cylinder has two circular faces Silinder mempunyai dua muka yang berbentuk bulatan	
(ii)	Cone has two curved faces Kon mempunyai 2 muka melengkung	
(iii)	Prism has two flat bases polygon shaped Prisma mempunyai dua tapak rata berbentuk poligon	

- (b) Simplify
 Permudahkan

(i) $\frac{m+1}{4m} - \frac{5}{6m}$

(ii) $\frac{v^2}{20u} \div \frac{uv}{5w}$

Answer / Jawapan

[4 marks]
 [4 markah]

$$\begin{aligned}
 & \frac{(\quad)}{\quad} \quad \frac{(\quad)}{\quad} \\
 & = \frac{(\quad)}{\quad} \\
 & = \frac{\quad}{\quad}
 \end{aligned}$$

- (c) Diagram 7.1 shows a rectangular field. The field is surrounded by a path which is 2 m wide. *Rajah 7.1 menunjukkan sebuah padang berbentuk segi empat tepat. Padang itu dikelilingi dengan lorong selebar 2 m.*

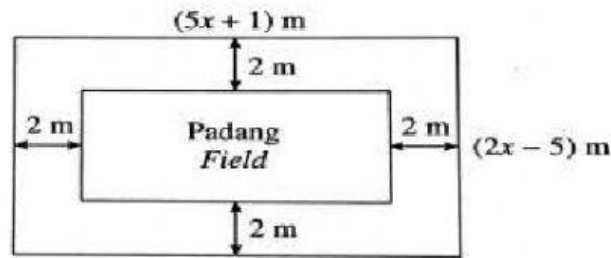


Diagram 7.1

Rajah 7.1

Write an algebraic expression, in m, which represents the perimeter of the field.

Tulis satu ungkapan algebra, dalam m, yang mewakili perimeter padang itu.

Answer / Jawapan

[3 marks]

[3 markah]

() ()

=

= ()

- 8 (a) Diagram 8.1 shows a circle with centre O.

Rajah 8.1 menunjukkan sebuah bulatan berpusat O.

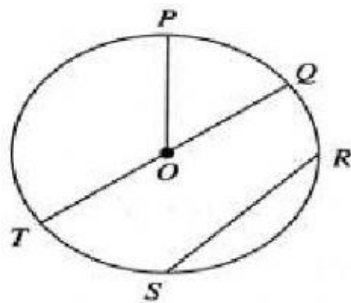


Diagram 8.1

Rajah 8.1

Name each of the following based on the labelling in the diagram.

[3 marks]

Namakan setiap yang berikut berdasarkan label dalam bulatan di atas.

[3 markah]

Answer / Jawapan

(i) Chord / Perentas : _____

(ii) Radius / Jejari: _____

(iii) Diameter / Diameter: _____

- (c) Diagram 9.2 shows the body mass index.
Rajah 9.2 menunjukkan indeks jisim badan.

$$M = \frac{w}{h^2}$$

Key / Petunjuk :

M = Body mass index / Indeks jisim badan
 w = Mass / Jisim (kg)
 h = Height / Tinggi (cm)

Diagram 9.2

Rajah 9.2

- (i) Express mass, in terms of body mass index, and height.
Ungkapkan jisim, dalam sebutan indeks jisim badan, dan tinggi
- (ii) Amalia is obese. Her mass is 85.5 kg with a height of 1.5 m. She is advised to reduce her body mass index to 26.0. Calculate the mass in kg, that Amalia needs to reduce. (no need to type the unit)
Amalia menghadapi obesiti. Jisimnya ialah 85.5 kg dengan tinggi 1.5 m. Dia dinasihatkan untuk menurunkan indeks jisim badannya kepada 26.0. Hitung jisim, dalam kg, yang perlu Amalia kurangkan.

Answer / Jawapan

[3 marks]

[3 markah]

i)

$w = \quad \quad \quad ^2$

ii)

$= \quad \quad \times \quad \quad ^2$

$=$