

JAWAPAN

BAB 1: Indeks

Muka Surat 1

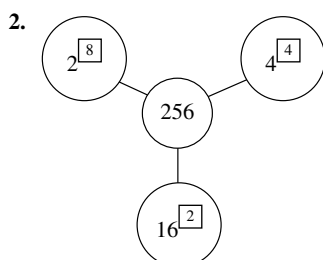
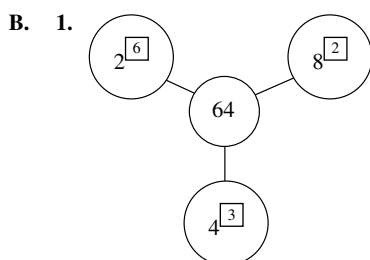
- A. 1. Asas/Base = -7 , Indeks/Index = 4
 2. Asas/Base = 0.8 , Indeks/Index = 6
 3. Asas/Base = $\frac{2}{9}$, Indeks/Index = 5
 4. Asas/Base = 10 , Indeks/Index = -3

- B. 1. 3^6 2. $(-7)^3$ 3. $\left(\frac{2}{5}\right)^4$
 4. $(0.6)^5$ 5. m^4 6. $(-k)^2$
 7. $\left(\frac{1}{p}\right)^3$

- C. 1. 64 2. -125 3. $\frac{1}{256}$
 4. $\frac{8}{27}$ 5. -0.343

Muka Surat 2

- A. 1. 5^4 2. 3^4
 3. 6^3 4. 8^3



- C. 1. 3 2. 5

Muka Surat 3

- A. 1. 5^{12} 2. 7^{10} 3. 10^8
 4. 13^5 5. 2^{16} 6. 3^{12}

- B. 1. y^9 2. m^{16} 3. $14m^5$
 4. $30m^{11}$

- C. 1. $2^{10} \times 3^4$ 2. $4^9 \times 9^2$ 3. $11^7 \times 7^3$

Muka Surat 4

- A. 1. 3^1 2. 5^3 3. 13^4
 4. 5^7 5. 6^4 6. 7^2

- B. 1. m^4 2. y^5 3. $3n^3$
 4. $2h^4$

- C. 1. 5 2. 1

Muka Surat 5

- A. 1. 7^{12} 2. 4^9 3. 2^{20}
 4. 11^{28} 5. k^{18} 6. r^{15}

- B. 1. $7^8 \times 11^{12}$ 2. $2^{12} \times 5^9 \times 7^6$
 3. $\frac{r^{12}}{r^4}$ 4. $\frac{x^6}{y^{10}}$

- C. 1. $49d^{10}$ 2. $125p^{12}q^3$
 3. $\frac{8x^{15}}{27y^{24}}$

Muka Surat 6

- A. 1. 1 2. 1
 3. 1 4. 1

- B. 1. $\frac{1}{2}$ 2. $\frac{1}{10}$
 3. $\frac{1}{r}$ 4. $\frac{1}{s}$

- C. 1. $\frac{1}{8}$ 2. $\frac{1}{6^4}$
 3. $\frac{1}{m^5}$ 4. $\frac{3}{2}$

- D. 1. 3^{-1} 2. 3^{-3}
 3. 3^{-4} 4. 3^{-6}

Muka Surat 7

- A. 1. $\sqrt[5]{9}$ 2. $\sqrt[5]{11}$ 3. $10^{\frac{1}{3}}$
 4. $m^{\frac{1}{6}}$ 5. $\sqrt[8]{p}$

- B. 1. 7 2. 0.7 3. $\frac{3}{2}$

- C. 1. $(7^3)^{\frac{1}{4}}$, $4\sqrt[4]{7^3}$, $(\sqrt[4]{7})^3$
 2. $(10^{\frac{1}{5}})^2$, $\sqrt[5]{10^2}$, $(\sqrt[5]{10})^2$
 3. $(15^4)^{\frac{1}{3}}$, $(15^{\frac{4}{3}})^4$, $(\sqrt[3]{15})^4$

- D. 1. 64 2. 25
 3. 36 4. 8

Muka Surat 8

A. 1. $16^{\frac{5}{4}} \times 8^{-\frac{2}{3}} \times 27^{\frac{1}{3}} = (2^{\frac{4}{4}})^{\frac{5}{4}} \times (2^3)^{-\frac{2}{3}} \times (3^3)^{\frac{1}{3}}$
 $= \boxed{32} \times \frac{1}{2^2} \times 3$
 $= \boxed{8} \times 3$
 $= \boxed{24}$

2. $\frac{8^{\frac{2}{3}} \times 16^{\frac{1}{4}}}{32^{\frac{3}{5}}} = \frac{(2^3)^{\frac{2}{3}} \times (2^4)^{\frac{1}{4}}}{(2^{\frac{5}{5}})^{\frac{3}{5}}}$
 $= \frac{2^2 \times 2}{\boxed{2^3}}$
 $= 2^{\boxed{0}}$
 $= \boxed{1}$

- B. 1. $9p^{-2}q^6$ 2. $\frac{1}{a^2}$ 3. $\frac{4k}{m^3}$
 4. $\frac{1}{h^8k^7}$ 5. $2m^4$

Muka Surat 9

- A. 1. $\frac{2}{9}$ 2. $\frac{7}{8}$

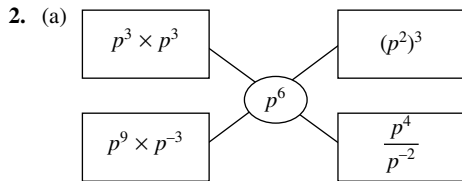
- B. 1. $y = \frac{1}{3}$ 2. $m = 1$
 C. 1. 20 2. 4 3. $\frac{1}{2}$

Muka Surat 10

1. $x = 4, x = -1$ 2. Selepas 9 jam/After 9 hours
 3. RM243 4. $x = -1, y = 1$

Praktis PT3

1. (a) (i) $(\sqrt[3]{64})^2$
 (ii) $(-5)^4$
 (iii) 3^0
 (b) (i) Palsu/False (ii) 5 (iii) B
 (c) (i) m^{-3} (ii) $x = \frac{1}{3}$



- (b) (i) C (ii) $\frac{1}{3}$
 (c) (i) m^3 (ii) $y = \frac{5}{2}$

3. (a)

$$\sqrt[3]{p^2} = \frac{2}{p^3}$$

$$p^{-2} = \frac{1}{p^2}$$

$$(p^2)^7 = p^{14}$$

- (b) (i) 2^5 (ii) r^6s^5
 (c) $\sqrt{16 + 9} = \sqrt{25} = 5$
 $\sqrt{16} + \sqrt{9} = 4 + 3 = 7$
 Maka, Gwen adalah salah.
 Thus, Gwen is wrong.

FOKUS KBAT

1. $m = 2, n = 4$
 2. (a) 8 000 bakteria/bacteria
 (b) 16 000 bakteria/bacteria
 3. Bilangan sel yang terjejas/Number of affected cells:
 $4^3 = 64 = 2^6$
 $2^6 \times 2 = 2^7 \leftarrow$ hari pertama/1st day
 $2^7 \times 2 = 2^8 \leftarrow$ hari ke-2/2nd day
 $2^8 \times 2 = 2^9 \leftarrow$ hari ke-3/3rd day
 $2^9 \times 2 = 2^{10} \leftarrow$ hari ke-4/4th day
 Penyakit itu menjadi serius pada hari ke-4.
 The disease become serious on the 4th day.
 4. $p = 1, q = 8$

BAB 2: Bentuk Piawai

Muka Surat 14

1. 3 2. 5 3. 4 4. 3
 5. 4 6. 3 7. 2 8. 1
 9. 3 10. 2

Muka Surat 15

- A. 1. 20.7 2. 5.10 3. 2 480
 4. 56 600 5. 0.053 6. 0.0805
 7. 0.40 8. 0.7010 9. 43 000
 10. 68 000

- B. 1. 26.5 2. 10.7
 3. 17.1 4. 20.8

Muka Surat 16

- A. 1. 3.8×10^4 2. 4.19×10^3
 3. 2.506×10^6 4. 7.9×10^{-3}
 5. 1.054×10^{-1} 6. 2.8×10^{-5}
 B. 1. 2 600 2. 73 000
 3. 6 050 000 4. 0.0781
 5. 0.006012 6. 0.000015

Muka Surat 17

- A. 1. 6.52×10^4 2. 1.197×10^2
 3. 4×10^4
 B. 1. 4.5×10^{-7} 2. 4.9×10^{-7}
 3. 6.72×10^3 4. 5.8×10^7
 5. 3.38×10^4 6. 6.5×10^{-4}

Muka Surat 18

- A. 1. $1.5 \times 10^7 \text{ cm}^3$ 2. $2.88 \times 10^2 \text{ km}$
 3. $1.4 \times 10^3 \text{ m}$

Praktis PT3

1. (a) 68 200, 2 010, 0.0925
 (b) 1 a.b./sig.fig. = 0.4
 2 a.b./sig.fig. = 0.37
 3 a.b./sig.fig. = 0.370
 (c) (i) 33.5
 (ii) 5.43
 2. (a) ✗
 ✓
 ✓
 (b) (i) 1.85×10^4
 (ii) 4.1×10^{-3}
 (c) $4.29 \times 10^{-2} \text{ m}^3$

FOKUS KBAT

1. 5×10^{-5} 2. 8×10^4

BAB 3: Matematik Pengguna: Simpanan dan Pelaburan, Kredit dan Hutang

Muka Surat 21

- A. Akaun simpanan/Savings account
 Akaun simpanan tetap/Fixed deposit account
 Akaun semasa/Current account
 B. 1. Akaun simpanan tetap/Fixed deposit account
 2. Akaun semasa/Current account
 3. Akaun simpanan/Savings account

Muka Surat 22

- A. Saham/Shares
 Amanah saham/Unit trust
 Hartanah/Real estate
 B. 1. Amanah saham/Unit trust
 2. Hartanah/Real estate
 3. Saham/Shares
 C. 1. Faedah mudah/Simple interest
 2. Faedah kompaun/Compound interest

Muka Surat 23

1. RM900 2. 3.5%
 3. 6 tahun/6 years 4. $y = 11 800$

Muka Surat 24

1. Selepas 3 tahun/After 3 years: RM9 200
 Selepas 6 tahun/After 6 years: RM10 400
 2. Bank A: RM11 750
 Bank B: RM12 250

Muka Surat 40

1. RM8 500 2. $y = 5$

Muka Surat 41

1. RM239 2. $n = 15$

Praktis PT3

1. (a) (i) Akaun simpanan dan akaun simpanan tetap
Savings account and fixed deposit account
(ii) Faedah mudah/*Simple interest*
(b) (i) RM350 (ii) RM2 850
(c) RM10 774.84
2. (a) (i) lebih tinggi/*higher*
(ii) Akaun semasa/*Current account*
(b) (i) RM160 (ii) $y = 2$
(c) 6.5%

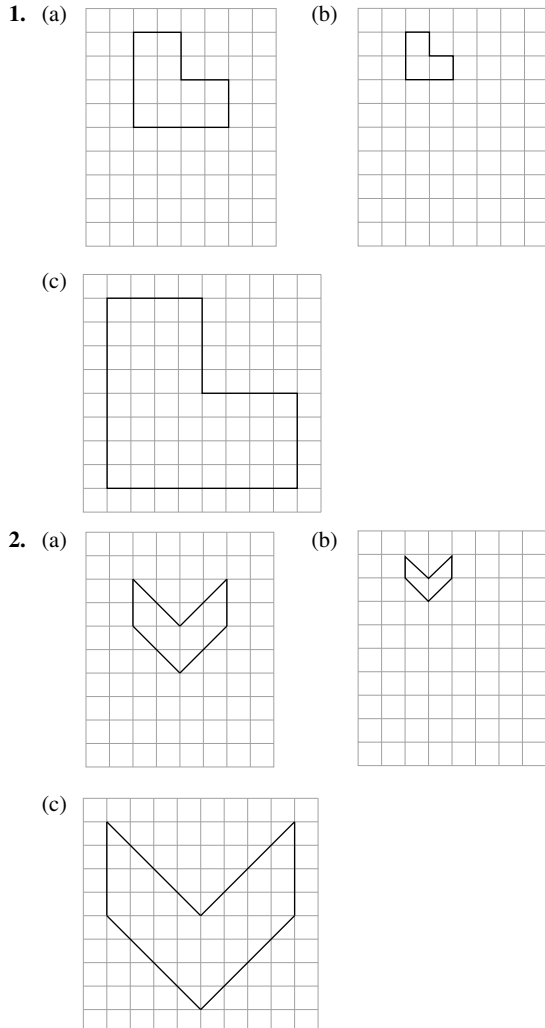
3. (a) $MV = RM8\ 000 \left(1 + \frac{6\%}{3} \right)^{(3)(5)}$
 $= RM8\ 000 (1.02)^{15}$
 $= RM10\ 766.95$
 (b) 12.5 tahun/*12.5 years*
 (c) RM90 000

FOKUS KBAT

25 tahun/*25 years*

BAB 4: Lukisan Berskala

Muka Surat 45



Muka Surat 46

1. (a) ✓ (b) ✓ (c) ✓
 (d) ✗ (e) ✓
 2. (a) 53° (b) 82° (c) 2
 (d) 5 (e) 3
 3. (a) sama/*equal* (b) berkadaran/*proportional*

Muka Surat 47

- A. 1. Skala ini bermaksud 2 unit pada lukisan berskala mewakili 1 unit pada objek.
This scale means 2 units on the scale drawing represent 1 unit on the object.

lebih besar/*larger*

2. Skala ini bermaksud 1 cm pada peta mewakili 10 km jarak sebenar.
This scale means 1 cm on the map represents 10 km of the real distance.

lebih kecil/*smaller*

- B. 1 cm : 1 km (✓)

Muka Surat 48

- A. 1. $1 : \frac{1}{3}$ 2. $1 : 3$ 3. $1 : \frac{1}{4}$
 B. 1. $1 : 2$ 2. $1 : 1$ 3. $1 : \frac{1}{2}$

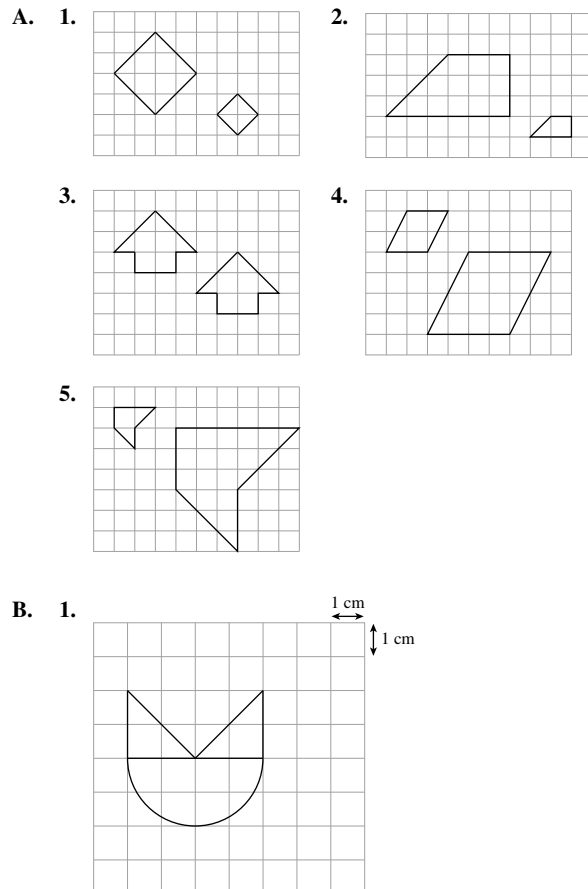
Muka Surat 49

1. 90 cm 2. 0.55 cm 3. 480 cm

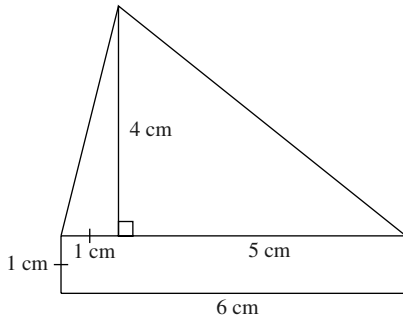
Muka Surat 50

1. 5 cm 2. 6 cm 3. 40 mm

Muka Surat 51

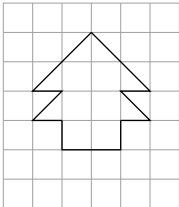


2.



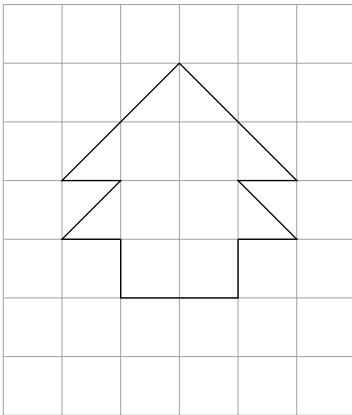
Muka Surat 52

1.



Skala = 1 : 2

2.



Skala = 1 : $\frac{2}{3}$

Muka Surat 53

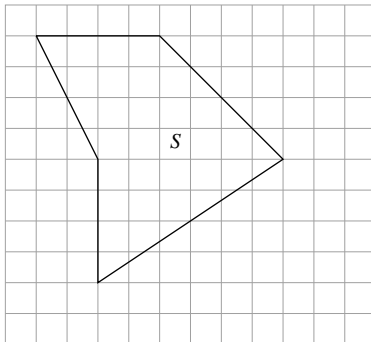
- 1. 8 m
- 2. 6 cm
- 3. 1 : 400
- 4. 3.4 cm
- 5. 45 m
- 6. 1 : 200

Muka Surat 54

- 1. 0.5 m × 2.5 m
- 2. 0.025 mm
- 3. (a) 4 cm
- (b) 25 m²

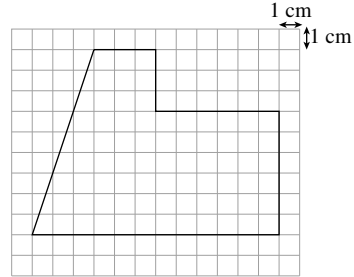
Praktis PT3

- 1. (a) (i) C
- (ii)



- (b) (i) 1 : 250
- (ii) 150 m²
- (c) 3.75 m
- 2. (a) (i) 1 : 2
- (ii) 1 : 1
- (iii) 1 : $\frac{1}{2}$
- (b) (i) 6 cm

(ii)



- (c) Ukuran rumah/Dimension of the house: 18 m × 30 m
- Ukuran lukisan/Dimension of the drawing: 6 cm × 10 cm
- Skala/Scale = 10 cm : 30 m = 1 cm : 3 m
- A: 2 cm × 5 cm → 6 m × 15 m
- B: 3 cm × 4 cm → 9 m × 12 m
- C: 2 cm × 4 cm → 6 m × 12 m
- D: 3 cm × 6 cm → 9 m × 18 m
- Jawapan/Answer: Bilik C/Room C

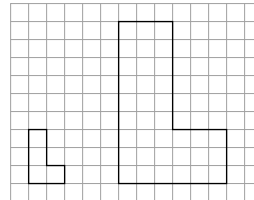
FOKUS KBAT

- 1. Rajah 2 dan Rajah 4/Figure 2 and Figure 4
- 2. Segi empat tepat/Rectangle: 2 × 4
- A: Sudut tidak sama/Angles are not equal
- B: 3 × 8
- C: 3 × 6 ✓
- D: 1 × 2 ✓
- E: 2 × 4 ✓
- F: Sudut tidak sama/Angles are not equal
- G: 2 × 5
- H: 4 × 8 ✓

$$\frac{3}{6} = \frac{1}{2} = \frac{2}{4} = \frac{4}{8}$$

Maka, lukisan berskala bagi segi empat tepat itu ialah C, D, E dan H.
Thus, the scale drawings of the rectangle are C, D, E and H.

3.

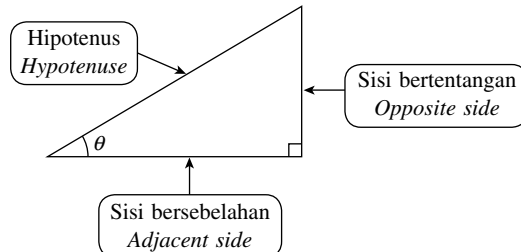


Perimeter poligon asal = 10 unit
Perimeter of the original polygon = 10 units
Perimeter bagi lukisan berskala = 30 unit
Perimeter of the scale drawing = 30 units
Skala lukisan/Scale drawing = 30 : 10
= 3 : 1
= 1 : $\frac{1}{3}$

BAB 5: Nisbah Trigonometri

Muka Surat 59

A.



B.

	Hipotenus <i>Hypotenuse</i>	Sisi bertentangan <i>Opposite side</i>	Sisi bersebelahan <i>Adjacent side</i>
1.	AC	AB	BC
2.	XZ	YZ	XY
3.	r	p	q

Muka Surat 60

A.

$$\sin \theta = \frac{\text{Sisi bertentangan/Opposite side}}{\text{Hipotenus/Hypotenuse}}$$

$$\cos/\cos \theta = \frac{\text{Sisi bersebelahan/Adjacent side}}{\text{Hipotenus/Hypotenuse}}$$

$$\tan \theta = \frac{\text{Sisi bertentangan/Opposite side}}{\text{Sisi bersebelahan/Adjacent side}}$$

B. 1. $\frac{QR}{PR}$ 2. $\frac{LM}{KM}$ 3. $\frac{x}{z}$ 4. $\frac{3}{5}$

Muka Surat 61

A. 1. $\frac{XZ}{YZ}$ 2. $\frac{ST}{RT}$ 3. $\frac{q}{r}$ 4. $\frac{4}{5}$

B. 1. $\frac{MN}{LM}$ 2. $\frac{DE}{EF}$ 3. $\frac{x}{z}$ 4. $\frac{5}{12}$

Muka Surat 62

1. $\sin x = \frac{4}{5}$, $\sin y = \frac{4}{5}$

$$\cos/\cos x = \frac{3}{5}, \quad \cos/\cos y = \frac{3}{5}$$

$$\tan x = \frac{4}{3}, \quad \tan y = \frac{4}{3}$$

Nisbah trigonometri bagi sudut x dan sudut y adalah sama kerana panjang setiap sisi untuk kedua-dua segi tiga adalah berkadaran.

The trigonometric ratios for angles x and y are the same because the length of each side of the two triangles are proportional.

2. (a) (i) $\frac{1}{2}$ (ii) $\frac{7}{8}$ (iii) $\frac{4}{7}$
(iv) $\frac{6}{7}$ (v) $\frac{1}{2}$ (vi) $\frac{12}{7}$

(b) Tidak/No

Muka Surat 63

A. 1. $\frac{3}{5}$ 2. $\frac{15}{17}$ 3. $\frac{4}{7}$

B. 1. $\frac{3}{5}$ 2. $\frac{7}{12}$

Muka Surat 64

A. 1. $\frac{5}{13}$ 2. $\frac{4}{5}$ 3. $\frac{5}{8}$

B. 1. $\frac{5}{13}$ 2. $\frac{5}{13}$

Muka Surat 65

A. 1. 2 2. $\frac{24}{7}$ 3. $\frac{5}{6}$

B. 1. 1.25 2. $\frac{\sqrt{21}}{5}$

Muka Surat 66

A. 1. $\frac{1}{\sqrt{2}}$ 2. $\frac{\sqrt{3}}{2}$ 3. $\frac{\sqrt{3}}{2}$

4. $\frac{1}{2}$ 5. $\frac{1}{\sqrt{3}}$ 6. 1

B. 1. $\frac{1}{2}$ 2. $\sqrt{3}$ 3. 1

4. $2\frac{1}{2}$ 5. $\sqrt{2}$

Muka Surat 67

A. 1. $40^\circ 18'$ 2. $21^\circ 36'$ 3. $60^\circ 15'$
4. $81^\circ 39'$ 5. $53^\circ 48'$

B. 1. 15.8° 2. 37.4° 3. 22.5°
4. 63.1° 5. 41.75°

C. 1. $71^\circ 50'$ 2. $64^\circ 4'$ 3. $3^\circ 52'$
4. $56^\circ 15'$ 5. $15^\circ 48'$

Muka Surat 68

1. 12 cm 2. 8 cm 3. 25 cm

Muka Surat 69

1. $y = 16.26^\circ$

2. (a) $\frac{3}{4}$ (b) $36^\circ 52'$

Muka Surat 70

1. 45°

2. (a) 32° (b) 16 m

Praktis PT3

1. (a) (i) Sisi bertentangan/Opposite side
(ii) Sisi bersebelahan/Adjacent side

(b) (i) $\frac{4}{3}$ (ii) $\frac{5}{13}$

(c) 53.13°

2. (a) (i) $\frac{4}{5}$ (ii) $\frac{3}{5}$ (iii) $\frac{4}{3}$

(b) (i) 14 cm (ii) $\frac{12}{13}$

(c) 2.5 m

FOKUS KBAT

$x = 46.1$

SOALAN-SOALAN BERORIENTASIKAN PISA

113 m

BAB 6: Sudut dan Tangen bagi Bulatan

Muka Surat 74

1. $x = 30^\circ$, $y = 5$ cm 2. $x = 70^\circ$, $y = 10$ cm
3. $x = 30^\circ$, $y = 12$ cm 4. $x = 60^\circ$, $y = 8$ cm

5. $x = 64^\circ$, $y = 10$ cm

Muka Surat 75

1. $x = 35^\circ$, $y = 70^\circ$ 2. $x = 120^\circ$, $y = 120^\circ$

3. $x = 100^\circ$, $y = 40^\circ$

4. $x = 84^\circ$, $y = 48^\circ$

5. $x = 25^\circ$, $y = 130^\circ$

Muka Surat 76

1. 55° 2. 50° 3. 40°

4. 40° 5. 70°

Muka Surat 77

1. (a) 38° (b) 52° (c) 71°

2. (a) 20° (b) 50°

3. $x = 110^\circ$, $y = 55^\circ$

Muka Surat 78

- A. 1. ACDE 2. TQRS 3. JKLM
- B. 1. $\angle ABC$ dan/and $\angle ADC$, $\angle DAB$ dan/and $\angle BCD$
 2. $\angle JML$ dan/and $\angle JKL$, $\angle MJK$ dan/and $\angle MLK$
 3. $\angle PRS$ dan/and $\angle PTS$, $\angle RPT$ dan/and $\angle RST$
- C. 1. j dan/and c , k dan/and b
 2. m dan/and a , n dan/and d
 3. g dan/and d , h dan/and c

Muka Surat 79

1. $x = 75^\circ$, $y = 65^\circ$ 2. $x = 85^\circ$, $y = 25^\circ$
 3. $x = 100^\circ$, $y = 60^\circ$ 4. $x = 115^\circ$, $y = 65^\circ$

Muka Surat 80

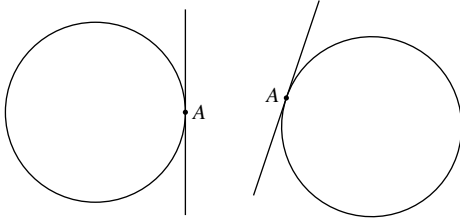
1. $x = 115^\circ$, $y = 80^\circ$ 2. $x = 90^\circ$, $y = 70^\circ$
 3. $x = 35^\circ$, $y = 110^\circ$ 4. $x = 75^\circ$, $y = 70^\circ$

Muka Surat 81

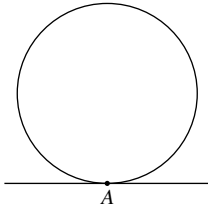
1. $x = 70^\circ$, $y = 85^\circ$ 2. $x = 130^\circ$
 3. $x = 60^\circ$ 4. $x = 95^\circ$

Muka Surat 82

- A. 1. ✓ 2. ✗
 3. ✓ 4. ✗
- B. 1. 2.

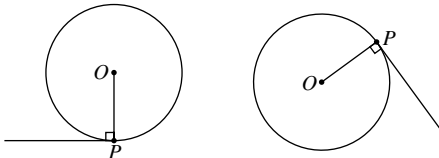


3.

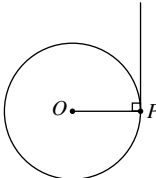


Muka Surat 83

- A. 1. 2.



3.



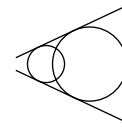
- B. 1. 30° 2. 30° 3. 50°
 4. 50° 5. 65°

Muka Surat 84

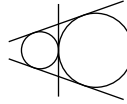
1. $x = 35^\circ$, $y = 5$
 2. $x = 112^\circ$, $y = 11.86$
 3. $x = 33^\circ$, $y = 8.904$
 4. $x = 55^\circ$, $y = 18.31$

Muka Surat 85

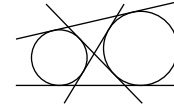
- A. 1. 60° 2. 70° 3. 18°
- B. 1. 2.



3.



4.



Muka Surat 86

1. $x = 25^\circ$, $y = 40^\circ$
 2. $x = 64^\circ$, $y = 58^\circ$
 3. $x = 55^\circ$, $y = 10^\circ$
 4. (a) 54°
 (b) 63°

Muka Surat 87

1. 80° 2. 100°
 3. 55° 4. 27°

Praktis PT3

1. (a) (i) ✓ (ii) ✗ (iii) ✓
 (b) (i) $x = 70^\circ$, $y = 20^\circ$
 (ii) $x = 100^\circ$, $y = 110^\circ$
 (c) 150°
2. (a) (i) $\angle ACD$
 (ii) (a) Benar/True
 (b) Benar/True
- (b) (i) $x = 90^\circ$, $y = 60^\circ$
 (ii) $x = 47^\circ$, $y = 37^\circ$
 (c) $x = 8$

FOKUS KBAT

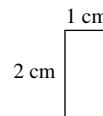
- (a) AE ialah tangen.
 AE is a tangent.
 $\angle ABC = \angle CAE = x$
 Diberi/Given $CA = CE$,
 $\triangle CAE$ ialah segi tiga sama kaki dan $\angle AEC = \angle CAE$.
 $\triangle CAE$ is an isosceles triangle and $\angle AEC = \angle CAE$.
 Maka/Thus, $\angle AEC = \angle ABC$.
- (b) Dalam rajah, $ABCD$ ialah sisi empat kitaran.
 In the diagram, $ABCD$ is a quadrilateral.
 $\angle ADE = \angle ABC = x$
 Dalam/In $\triangle ADE$, $\angle ADE = x$ dan/and $\angle AEC = x$.
 Ini bererti/This means $\angle ADE = \angle AEC$.
 Maka, $\triangle ADE$ ialah segi tiga sama kaki.
 Thus, $\triangle ADE$ is an isosceles triangle.

BAB 7: Pelan dan Dongakan

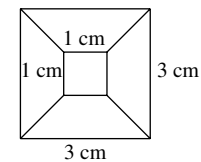
Muka Surat 91

- A. 1. ✓ 2. ✗ 3. ✓

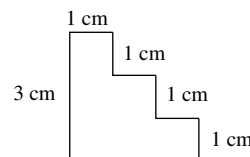
B. 1.



2.

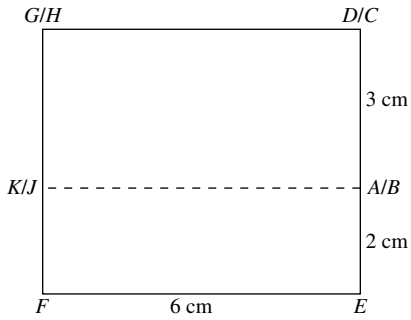


3.

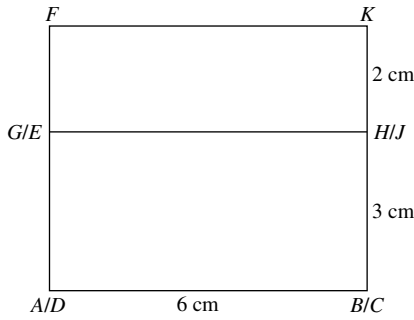


Muka Surat 92

1.



2.



Muka Surat 93

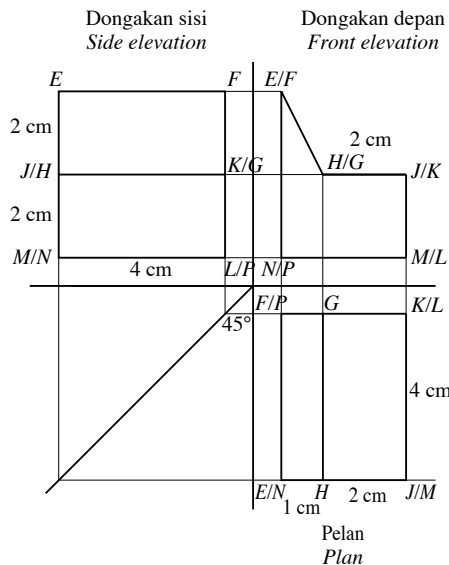
- A. 1. Sama
Same
2. Tidak sama
Not the same
3. Sama
Same

B.

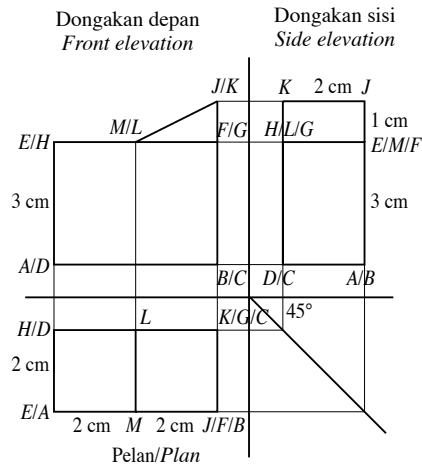
Tepi yang panjangnya berubah Edges that changed in length	Sudut yang saiznya berubah Angles that changed in size
1. TF, PA	$\angle PAB, \angle TFE$
2. VA, VB, VC, VD	$\angle AVB, \angle VAB, \angle VBA, \angle CVD, \angle BVD, \angle VDB, \angle VBD, \angle VCD, \angle AVC, \angle VAC, \angle VCA, \angle VDC$

Muka Surat 94

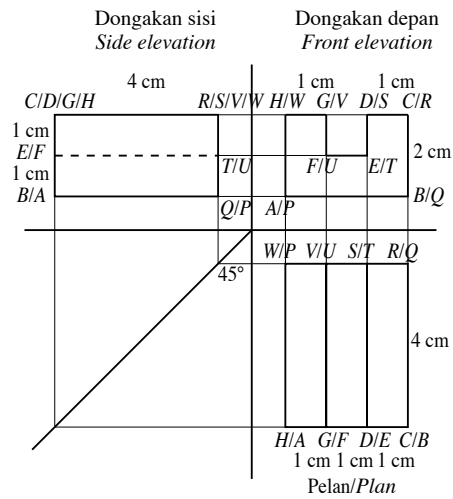
1.



2.

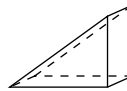


3.

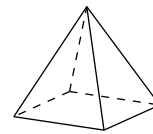


Muka Surat 96

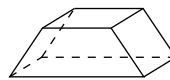
1.



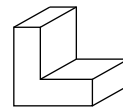
2.



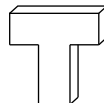
3.



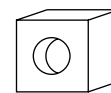
4.



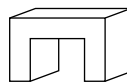
5.



6.

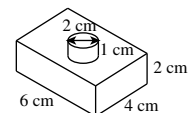


7.



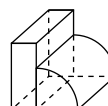
Muka Surat 98

1. (a) Produk itu adalah satu blok yang terdiri daripada tapak berbentuk kuboid dan silinder tegak di atasnya.
The product is a block made up of a base in the shape of a cuboid and a right cylinder on the top of it.



(b) 51.14 cm^3

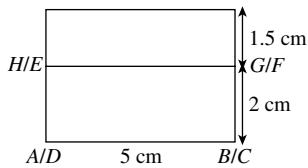
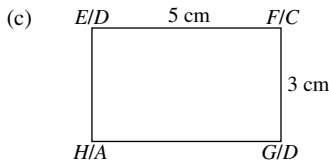
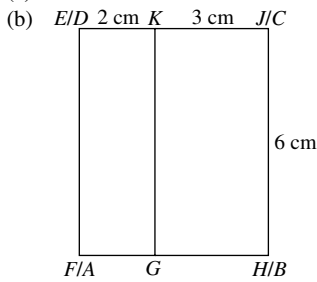
2. (a)



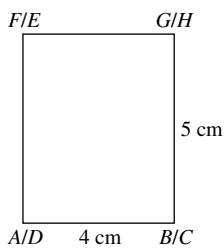
(b) 68.3 cm^3

Praktis PT3

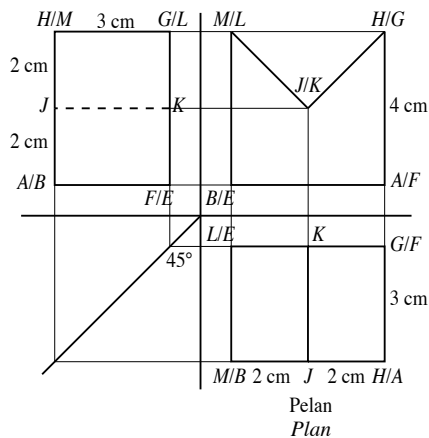
1. (a) B



2. (a)

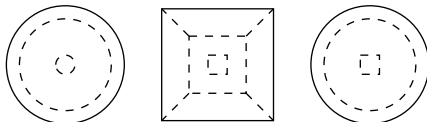


(b) Dongakan sisi Side elevation Dongakan depan Front elevation

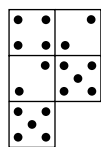


FOKUS KBAT

1.



2.



18 titik/18 dots

SOALAN-SOALAN BERORIENTASIKAN PISA

1. C

2. Lebar bumbung/Width of the roof

$$= \sqrt{1^2 + 2.5^2}$$

$$= \sqrt{7.25}$$

$$= 2.69 \text{ m}$$

Panjang bumbung/Length of the roof

$$= 5.00 \text{ m}$$

Jumlah luas bumbung/Total area of the roof

$$= 2(5 \times 2.69)$$

$$= 26.9 \text{ m}^2$$

BAB 8: Lokus dalam Dua Dimensi

Muka Surat 103

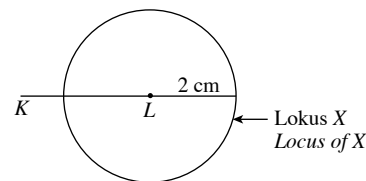
1. Satu lengkok/An arc
2. Satu bulatan/A circle
3. Satu garis lurus mengufuk/A horizontal straight line
4. Satu lengkok/An arc
5. Satu garis lurus mencondong/An inclined straight line

Muka Surat 104

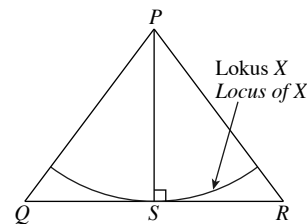
- A.
1. Pembahagi dua sama serenjang garis lurus PQ .
The perpendicular bisector of the straight line PQ .
 2. Dua garis selari yang berjarak sama dari garis lurus PQ .
Two parallel lines that are equidistant from the straight line PQ .
 3. Pembahagi dua sama sudut bagi $\angle QPR$.
The angle bisector of $\angle QPR$.
 4. Satu bulatan yang berpusat P .
A circle with centre P .
 5. Satu garis yang selari dan berjarak sama dari dua garis selari, PQ dan RS .
A line that is parallel and equidistant from two parallel lines, PQ and RS .
- B.
1. Dua garis selari yang berjarak 3 cm dari garis KL .
Two parallel lines at a distance of 3 cm from the line KL .
 2. Satu pembahagi dua sama sudut.
The bisector of the angles.

Muka Surat 105

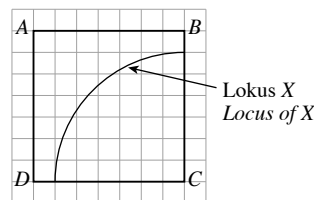
1.



2.

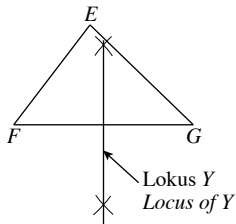


3.

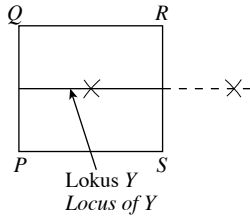


Muka Surat 106

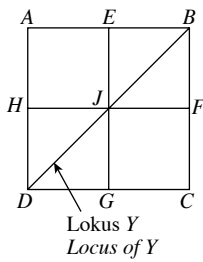
1.



2.

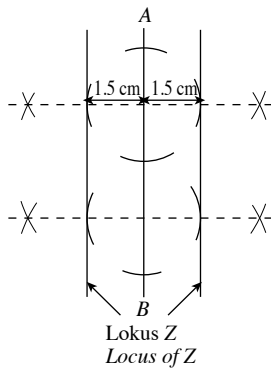


3.

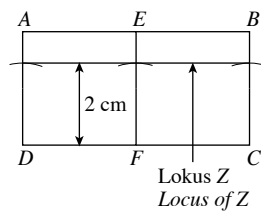


Muka Surat 107

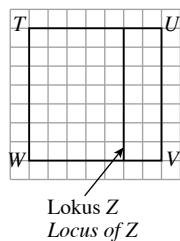
1.



2.

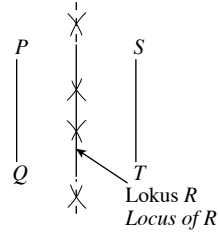


3.

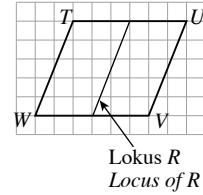


Muka Surat 108

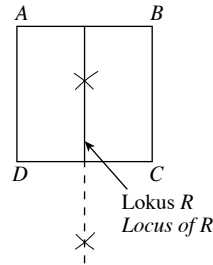
1.



2.

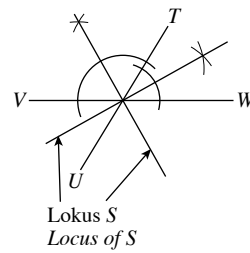


3.

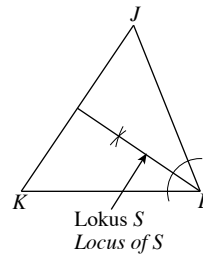


Muka Surat 109

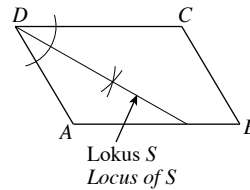
1.



2.

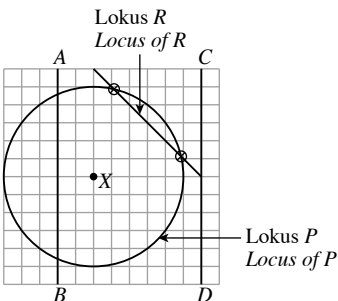


3.



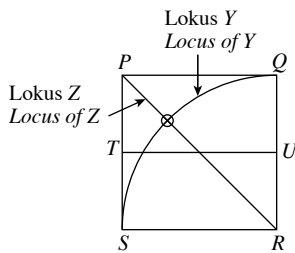
Muka Surat 110

1.

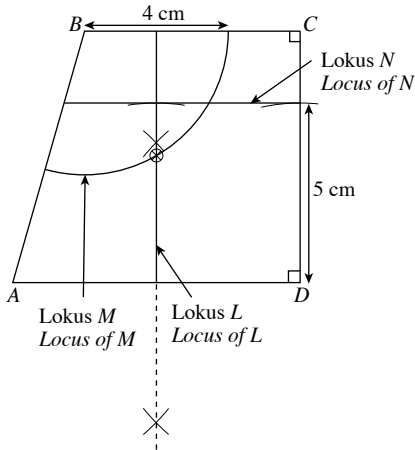


2. (a) Garis TU
Line TU

(b)

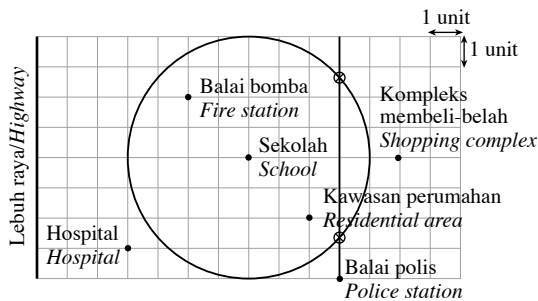


Muka Surat 111



Muka Surat 112

- (a) Balai polis/Police station
(b), (c)



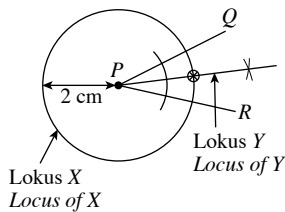
- (d) Antara dua lokasi yang mungkin, adalah lebih sesuai jika taman dibina lebih dekat dengan kawasan perumahan kerana ini dapat memudahkan penduduk di situ menggunakan taman itu.

Between the two possible locations, it is more suitable if the park is built closer to the residential area as this will enable the residents to use the park.

Praktis PT3

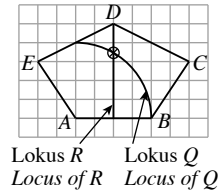
1. (a) (i) Satu bulatan/A circle
(ii) B (✓) E (✓)

(b)

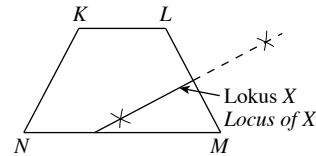


- (c) (i) Garis EC
Line EC

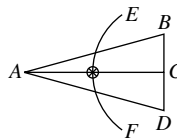
- (ii), (iii)



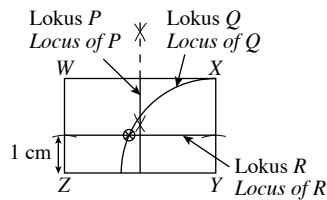
2. (a) (i) N, P
(ii) Garis DB/Line DB
(b) (i)



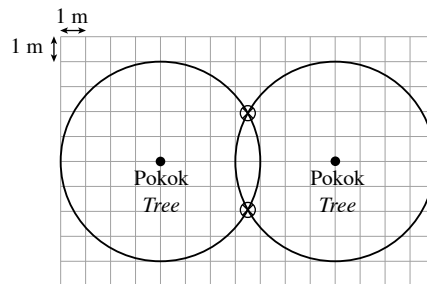
(ii)



(c)



FOKUS KBAT



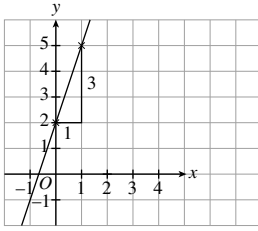
BAB 9: Garis Lurus

Muka Surat 116

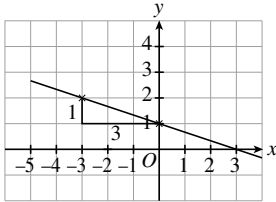
- A.
1. $m = 3, c = -4$
 2. $m = -1, c = 5$
 3. $m = \frac{4}{5}, c = -1$
 4. $m = 5, c = 1$
 5. $m = -\frac{1}{2}, c = 7$
 6. $m = -3, c = 0$
- B.
1. $3, y = 2x + 3$
 2. $-4, y = 3x - 4$
 3. $1, y = -2x + 1$
 4. $-3, y = \frac{1}{2}x - 3$
 5. $4, y = 4$
 6. $-6, y = -\frac{2}{5}x - 6$

Muka Surat 117

A. 1. $m = \frac{3}{1}, c = 2$



2. $m = -\frac{1}{3}, c = 1$



B. 1. $y = -2x - 4$

2. $y = \frac{2}{3}x + 2$

3. $y = -x + 5$

Muka Surat 118

1. $m = 2, c = -\frac{2}{3}$

2. $m = \frac{3}{4}, c = -3$

3. $m = -\frac{1}{4}, c = 5$

4. $m = -\frac{5}{2}, c = \frac{1}{2}$

5. $m = -4, c = -8$

6. $m = -\frac{3}{2}, c = \frac{1}{2}$

7. $m = \frac{5}{2}, c = 4$

Muka Surat 119

1. $m = -\frac{4}{3}, c = 4$

2. $m = -3, c = 6$

3. $m = 3, c = 9$

4. $m = \frac{1}{2}, c = -2$

5. $m = -\frac{5}{2}, c = 5$

Muka Surat 120

A. 1. (a) Tidak/No

(b) Ya/Yes

2. (a) Ya/Yes

(b) Tidak/No

B. 1. $h = 1$

2. $k = 25$

Muka Surat 121

1. Selari/Parallel

2. Tidak selari/Not parallel

3. Selari/Parallel

4. Tidak selari/Not parallel

Muka Surat 122

1. $y = 3x - 7$

2. $y = \frac{1}{2}x - 2$

3. $y = -\frac{1}{2}x - \frac{3}{2}$

4. $y = -2x + 3$

Muka Surat 123

1. (2, -3)

2. (3, -2)

3. (3, 1)

Muka Surat 124

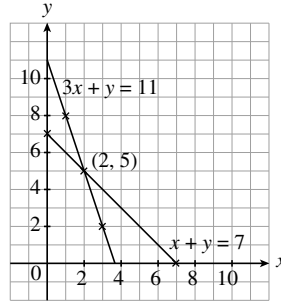
1. (5, -1)

2. (-2, 4)

3. (2, -1)

Muka Surat 125

A. 1.



$x + y = 7$

x	0	7
y	7	0

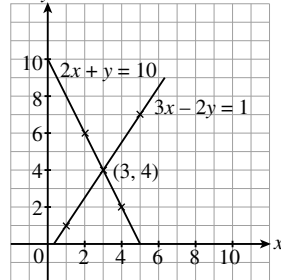
$3x + y = 11$

x	1	3
y	8	2

Titik persilangan ialah (2, 5).

The point of intersection is (2, 5).

2.



$2x + y = 10$

x	2	4
y	6	2

$3x - 2y = 1$

x	1	5
y	1	7

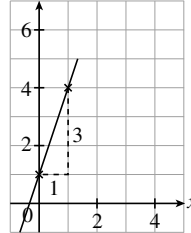
Titik persilangan ialah (3, 4).

The point of intersection is (3, 4).

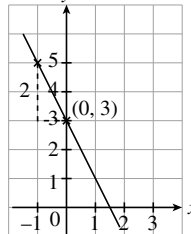
Muka Surat 126

1. A(6, 0), B(0, 4)

2. (a)



(b)



3. $m = 3, c = -1$

4. (2, 6) dan/and (5, 1)

Muka Surat 127

1. Persamaan garis lurus BC: $y = \frac{1}{2}x + 4$

The equation of the line BC: $y = \frac{1}{2}x + 4$.

C(0, 4)

2. (a) $k = 5$

(b) $y = \frac{1}{2}x + 8$

3. (a) $m = \frac{1}{2}$

(b) $y = -\frac{3}{2}x + 12$

Praktis PT3

1. (a) (i) 5, 1

(ii) $-\frac{1}{2}, -5$

(iii) -2, 7

(b) (i) $y = -1$

(ii) $x = 3$

(iii) $y = x$

(iv) $y = -x + 2$

(c) (-1, 0)

2. (a) (i) Ya/Yes (ii) Tidak/No
 (iii) Ya/Yes
 (b) $m = \frac{2}{3}, c = 2$
 (c) (i) $m = 2$ (ii) $y = 2x + 3$

3. (a) (1, -3) ✓
 (4, 3) ✓
 (b) (i) A(4, 0), B(0, 3) (ii) $m = -\frac{2}{3}, c = 2$
 (c) (i) $k = 5$ (ii) (3, 8)

FOKUS KBAT

- (a) $m = -\frac{1}{3}$ (b) $y = -\frac{1}{3}x + 10$
 (c) (9, 7)

KERTAS MODEL PT3

1. (a) (i) (a) 4 (b) 0
 (ii) Palsu/False
 (b) (i) 8
 (ii) 1.64
 (c) $y = 3$
 2. (a) (i) 3 a.b. (ii) 2 a.b.
 (b) (i) 16 (ii) Sebutan ke-9/9th term
 (c) $\frac{2}{m+2}$

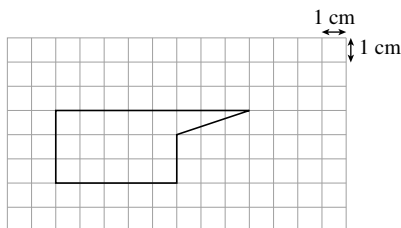
3. (a) (i) Akaun semasa tidak memberi sebarang faedah.
Current account does not give any interest.

(ii)

Tempoh (tahun) Period (years)	Jumlah faedah Total interest
2	RM100
4	RM240

- (b) (i) RM10 265.48 (ii) RM3 065.48
 (c) $n = 12$

4. (a) (i) Dongakan sisi/Side elevation
 (ii) Pelan/Plan
 (iii) Dongakan depan/Front elevation
 (b) (i) 5 cm
 (ii)



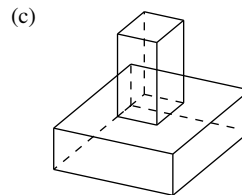
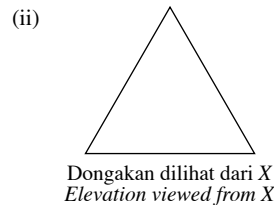
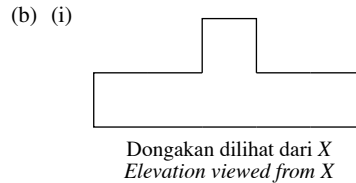
- (c) (i) 10^2
 (ii) $8\frac{1}{3}$ jam
 (iii) Tidak. Pekerja itu tidak akan dapat menyelesaikan kerja itu dalam 8 jam kerana dia memerlukan $8\frac{1}{3}$ jam bagi menyelesaikan keseluruhan pekerjaan itu.
No. The worker unable to finish the task in 8 hours because he needs $8\frac{1}{3}$ hours to finish the entire task.

5. (a) (i) 1 : 2
 (ii) 1 : 1
 (iii) $1 : \frac{1}{2}$
 (b) (i) 200 m
 (ii) 12 cm
 (c) 10 000 cm²

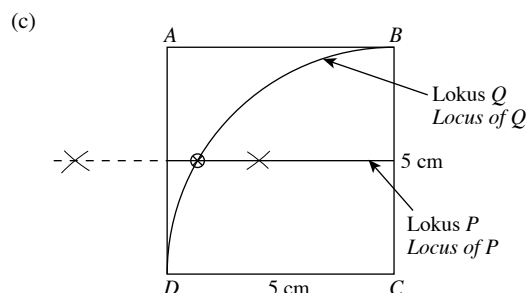
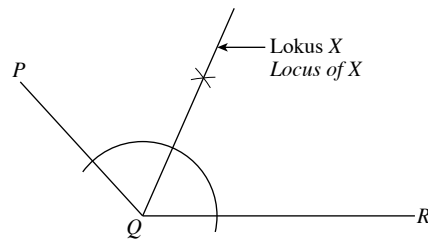
6. (a) (i) $\frac{1}{2}$ (ii) $\frac{1}{\sqrt{2}}$ (iii) $\sqrt{3}$
 (b) $\frac{5}{12}$
 (c) (i) $\frac{4}{7}$ (ii) $\frac{15}{31}$

7. (a) (i) Bilangan unsur bagi set A ialah 5.
The number of elements of set A is 5.
 (ii) Set R ialah subset bagi set P.
Set R is the subset of set P.
 (iii) 6 ialah unsur bagi set M.
6 is the element of set M.
 (b) (i) $y = 35^\circ$ (ii) 125°
 (c) 65°

8. (a) (i) Banyak kepada banyak/Many-to-many
 (ii) {8, 12}
 (iii) {(4, 8), (4, 12), (6, 12)}



9. (a) (i) 5 (ii) 5.5
 (b)



10. (a) (3, 0), (4, -2), (-1, 8)
 (b) (i) 4
 (ii) 25 unit/25 units
 (c) 36 unit²/36 units²