

JAWAPAN

BAB 1: NOMBOR NISBAH

Muka Surat 1

A

1. -224 2. -32°C 3. +9.5 m

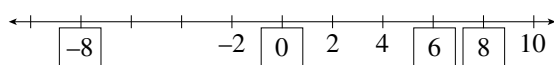
B

1. -68 m 2. +RM0.70 3. $+24^{\circ}\text{C}$
4. -8 langkah/steps

C

$-6\frac{3}{5}$	72	8.15	0	-326	$\frac{2}{3}$	0.06	109
	✓		✓	✓			✓

D



Muka Surat 2

A

1. 9, 6, 4, -4, -7, -11
2. -12, -3, -1, 0, 8, 14
3. 35, 21, 9, -2, -6, -18
4. -25, -16, -8, 0, 11, 28
5. 17, 10, 5, -14, -19, -32

B

1. 13 2. -5 3. 6
4. -24 5. -9 6. 18
7. -35 8. -14

Muka Surat 3

A

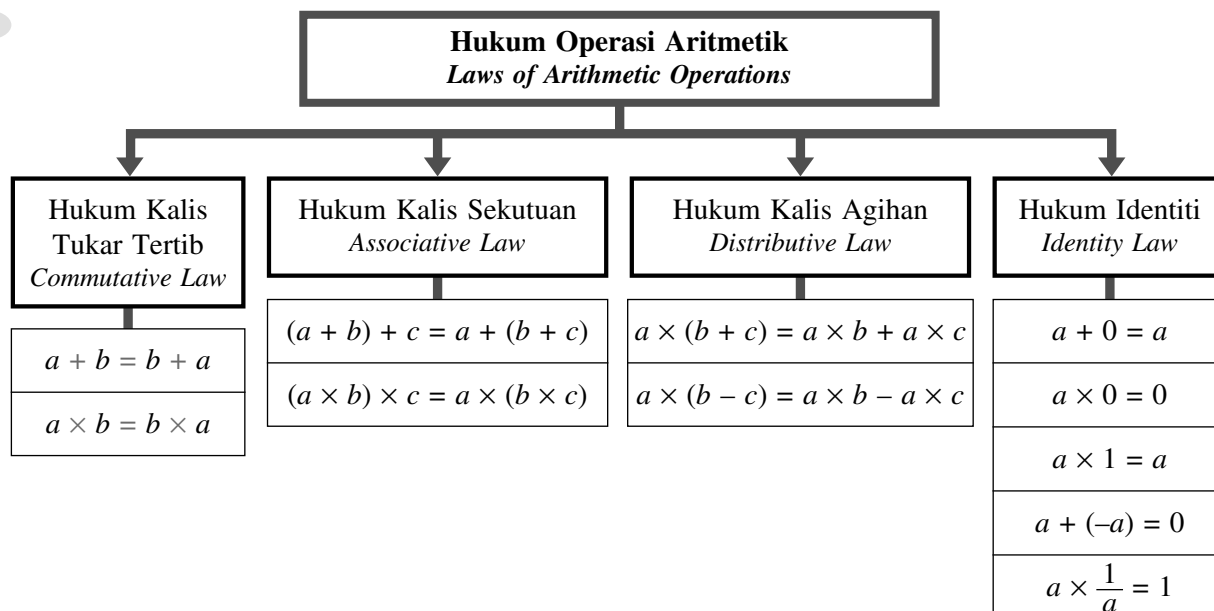
1. -10 2. 48 3. -63
4. 16 5. -3 6. 4
7. -2 8. 4

B

1. -21 2. 9 3. -2
4. -6 5. 3 6. -10

Muka Surat 4

A



B

1. $27 + 135 + 73$
 $= 27 + 73 + 135$
 $= 100 + 135$
 $= 235$
2. $250 \times 69 \times 4$
 $= (250 \times 4) \times 69$
 $= 1\,000 \times 69$
 $= 69\,000$

C

1. $76 + 138 + 24 + 162$
 $= (76 + 24) + (138 + 162)$
 $= 100 + 300$
 $= 400$
2. 299×8
 $= (300 - 1) \times 8$
 $= (300 \times 8) - (1 \times 8)$
 $= 2\,400 - 8$
 $= 2\,392$

$$\begin{aligned}
 3. \quad & 9 \times 2\,060 \\
 & = 9 \times (2\,000 + 60) \\
 & = 9 \times 2\,000 + 9 \times 60 \\
 & = 18\,000 + 540 \\
 & = 18\,540
 \end{aligned}$$

Muka Surat 5

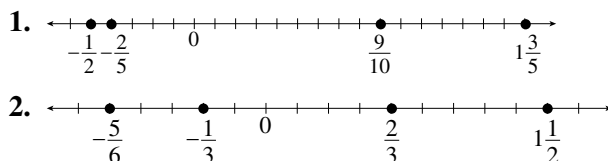
- 151
- 175 m
- 5 minit/minutes $\rightarrow 3^\circ\text{C}$
 Selepas setengah jam (30 minit) $\rightarrow 3^\circ\text{C} \times \frac{30}{5}$
 After half an hour (30 minutes) $= 18^\circ\text{C}$
 Suhu akhir/Final temperature $= (-20 + 18)^\circ\text{C}$
 $= -2^\circ\text{C}$

Suhu akhir itu belum berada di atas takat beku selepas setengah jam.

The final temperature would not be above the freezing point after half an hour.

Muka Surat 6

A



B

- $-\frac{6}{7}, -\frac{1}{2}, -\frac{5}{14}, \frac{3}{14}, \frac{4}{7}$
- $\frac{5}{6}, \frac{19}{24}, -\frac{3}{4}, -\frac{7}{8}, -\frac{11}{12}$

Muka Surat 7

- $-1\frac{19}{20}$
- $\frac{1}{3}$
- $-\frac{1}{5}$
- $-1\frac{1}{10}$
- $-\frac{1}{9}$

Muka Surat 8

- RM20 800
- 14
- (a) 110 (b) $16\frac{2}{3} \text{ cm}^3$

Muka Surat 9

A

- 1.6, -1.2, -0.8, -0.4
- 2.75, -2.25, -1.50, -1.25
- 0.12, -0.06, 0.08, 0.14

B

- 1.3, -0.8, -0.4, 0.7, 1.9
- 3.1, -2.7, -1.5, 1.8, 2.3
- 5.02, -4.82, -4.26, 4.57, 4.78
- 2.765, -2.675, -0.876, 0.657, 2.567

C

- 1.1, 0.5, -0.2, -0.3, -1.7
- 3.2, 0.9, -1.4, -2.8, -4.6
- 1.64, 1.43, -1.06, -1.22, -1.85
- 4.681, 4.502, -4.748, -5.092, -5.347

Muka Surat 10

- 11.57
- 1.8
- 3.52
- 6.18
- 7.25
- 1.05
- 9.53
- 9.1
- 4.94

Muka Surat 11

- -5.7°C
- 5.4 km
- RM28.30

Muka Surat 12

A

- Nombor nisbah/Rational number
- Nombor nisbah/Rational number
- Nombor nisbah/Rational number
- Nombor nisbah/Rational number

B

- $5\frac{7}{9}, 0.33333\dots, -101, 0, -2.78$

C

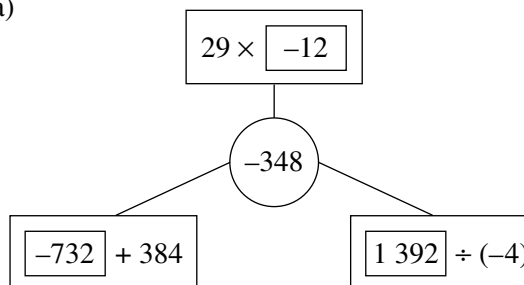
- $-2\frac{1}{4}$
- $7\frac{1}{2}$
- $1\frac{11}{12}$
- $-3\frac{1}{2}$

Muka Surat 13

- 54 minit/minutes
- 48.6 ekar/acres
- RM100

Praktis PT3

- (a)



- (b) $-\frac{2}{15}$
- (c) RM152

- (a) (i) Harbin (ii) 6.5°C
(iii) 4 bandar raya/cities
(b) (i) $p + q = -40 + 6 = -34$
(ii) $7 \times 150 + 7 \times 18 + 7 \times 32$
 $= 7 \times (150 + 18 + 32)$
 $= 7 \times 200$
 $= 1\,400$
(c) Tingkat 5/5th floor

FOKUS KBAT

700 ml

BAB 2: FAKTOR DAN GANDAAN

Muka Surat 16

A

- Ya/Yes
- Bukan/No
- Ya/Yes

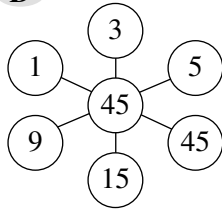
B

- 1, 2, 4, 7, 14, 28
- 1, 2, 4, 5, 8, 10, 20, 40

C

9, 36, 54

D



Muka Surat 17

A

1. Ya/Yes 2. Bukan/No 3. Bukan/No

B

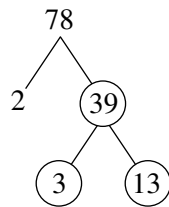
1. 5, 2, 3 2. 13, 2, 3 3. 2, 7

C

1. $52 = 2 \times 2 \times 13$ 2. $105 = 3 \times 5 \times 7$

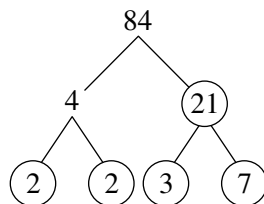
D

1.



Maka/Thus, $78 = 2 \times 3 \times 13$

2.



Maka/Thus, $84 = 2 \times 2 \times 3 \times 7$

Muka Surat 18

A

1. Ya/Yes 2. Bukan/No
3. Ya/Yes 4. Bukan/No

B

1, 3, 5, 15

C

1. 1, 2, 4 2. 3, 5, 15

Muka Surat 19

1. 4 2. 9 3. 15 4. 8 5. 6
6. 14

Muka Surat 20

1. (a) 6
(b) Bilangan gambar foto
Number of photographs
= 5
Bilangan keratan akhbar
Number of newspaper cuttings
= 7
2. 75 cm

Muka Surat 21

A

1. Bukan/No 2. Ya/Yes 3. Ya/Yes

B

1. 14 63 105
2. 30 45 90

C

1. 18, 36, 54 2. 12, 24, 36

Muka Surat 22

1. 21 2. 24 3. 45 4. 36 5. 90
6. 72

Muka Surat 23

1. 24 2. 9.15 p.m.

Praktis PT3

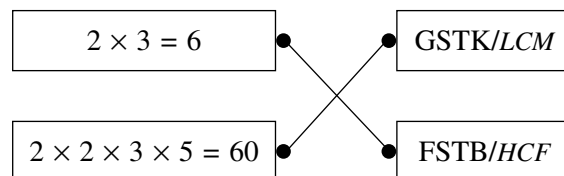
1. (a)

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18

(b) (i) **D** (ii) 24, 72, 168

(c) 7.30 a.m.

2. (a)



(b) (i) 2, 3, 13 (ii) Kad R/Card R

(c) (i) 30 cm (ii) 12

FOKUS KBAT

1. 2020, 2024 dan/and 2028
2. (a) 11.00 a.m.
(b) Bas/bus C
3. 8 cm
4. 4 Januari/January 2019

BAB 3: KUASA DUA, PUNCA KUASA DUA, KUASA TIGA DAN PUNCA KUASA TIGA

Muka Surat 28

A

1. Bukan/No 2. Ya/Yes
3. Ya/Yes 4. Bukan/No

B

1. Diberi/Given $19 \times 19 = 361$,
maka/thus $\sqrt{361} = \sqrt{19 \times 19} = 19$

2. Diberi/Given $0.8 \times 0.8 = \boxed{0.64}$,
 maka/thus $\sqrt{\boxed{0.64}} = \sqrt{0.8 \times 0.8}$
 $= \boxed{0.8}$

3. Diberi/Given $4.2 \times 4.2 = 17.64$,
 maka/thus $\sqrt{17.64} = \sqrt{\boxed{4.2} \times \boxed{4.2}}$
 $= \boxed{4.2}$

4. Diberi/Given $\frac{3}{4} \times \frac{3}{4} = \boxed{\frac{9}{16}}$,
 maka/thus $\sqrt{\boxed{\frac{9}{16}}} = \sqrt{\boxed{\frac{3}{4}} \times \boxed{\frac{3}{4}}}$
 $= \frac{3}{4}$

Muka Surat 29

A

1. 144 2. 6.25 3. $\frac{49}{81}$

B

1. 729 2. 88.36 3. $\frac{49}{144}$ 4. $28\frac{4}{9}$

C

1. 16 2. 0.2 3. $\frac{2}{3}$ 4. $2\frac{1}{3}$

D

1. 18.76 2. 8.08 3. 0.83 4. 2.14

Muka Surat 30

A

- $30 < 32 < 40$
 $30^2 < 32^2 < 40^2$
 $900 < 32^2 < 1\ 600$
 Maka/Thus, $32^2 \approx 30^2 \approx 900$
- $10 < 11.98 < 20$
 $10^2 < 11.98^2 < 20^2$
 $100 < 11.98^2 < 400$
 Maka/Thus, $11.98^2 \approx 10^2 \approx 100$
- $-6.2 \approx -6$
 $(-6.2)^2 \approx (-6)^2$
 Maka/Thus, $(-6.2)^2 \approx 36$
- $0.80 < 0.87 < 0.90$
 $(0.80)^2 < (0.87)^2 < (0.90)^2$
 $0.64 < 0.87^2 < 0.81$
 Maka/Thus, $0.87^2 \approx 0.90^2 \approx 0.81$
- $50 < 50.9^2 < 60$
 $50^2 < 50.9^2 < 60^2$
 $2\ 500 < 50.9^2 < 3\ 600$
 Maka/Thus, $50.9^2 \approx 50^2 \approx 2\ 500$

B

1. $\sqrt{49} < \sqrt{52} < \sqrt{64}$
 $7 < \sqrt{52} < 8$
 Maka/Thus, $\sqrt{52} \approx \sqrt{49}$
 ≈ 7

2. $\sqrt{16} < \sqrt{21.7} < \sqrt{25}$
 $4 < \sqrt{21.7} < 5$
 Maka/Thus, $\sqrt{21.7} \approx \sqrt{25}$
 ≈ 5

3. $\sqrt{0.64} < \sqrt{0.78} < \sqrt{0.81}$
 $0.8 < \sqrt{0.78} < 0.9$
 Maka/Thus, $\sqrt{0.78} \approx \sqrt{0.81}$
 ≈ 0.9

C

1. 13 2. 0.35 3. 20 4. $\frac{3}{7}$

Muka Surat 31

- 2
- (a) 36 m (b) RM594
- 36 cm²

Muka Surat 32

A

1. Ya/Yes 2. Bukan/No 3. Ya/Yes

B

1. $\sqrt[3]{1\ 728}$
 $= \sqrt[3]{\boxed{12} \times \boxed{12} \times \boxed{12}}$
 $= \boxed{12}$

2. $\sqrt[3]{0.343}$
 $= \sqrt[3]{\boxed{0.7} \times \boxed{0.7} \times \boxed{0.7}}$
 $= \boxed{0.7}$

3. $\sqrt[3]{-3\ 375}$
 $= \sqrt[3]{\boxed{(-15)^3}}$
 $= \boxed{-15}$

4. $\sqrt{\frac{125}{216}} = \sqrt{\left(\frac{5}{6}\right)^3}$
 $= \boxed{\frac{5}{6}}$

5. $\sqrt[3]{-37\frac{1}{27}} = \sqrt[3]{\left(-3\frac{1}{3}\right)^3}$
 $= \boxed{-3\frac{1}{3}}$

Muka Surat 33

A

- 1 000 2. 0.216
- 1.728 4. $\frac{27}{343}$
- $-10\frac{37}{216}$

B

- 2 744 2. -373.248
- $\frac{343}{729}$ 4. $-101\frac{17}{27}$

C

1. -6 2. 0.7 3. $-1\frac{1}{3}$ 4. $\frac{3}{4}$ 5. $2\frac{1}{2}$

D

1. 3.57 2. 0.94 3. -4.27 4. -1.50

Muka Surat 34**A**

1. $3^3 < 3.2^3 < 4^3$
 $27 < 3.2^3 < 64$
 Maka/Thus, $3.2^3 \approx 3^3 \approx 27$
2. $(-9)^3 < (-8.8)^3 < (-8)^3$
 $-729 < (-8.8)^3 < -512$
 Maka/Thus, $(-8.8)^3 \approx (-9)^3 \approx -729$
3. $20^3 < 28.3^3 < 30^3$
 $8\ 000 < 28.3^3 < 27\ 000$
 Maka/Thus, $28.3^3 \approx 30^3 \approx 27\ 000$

B

1. $\sqrt[3]{-125} < \sqrt[3]{-65} < \sqrt[3]{-64}$
 $-5 < \sqrt[3]{-65} < -4$
 Maka/Thus, $\sqrt[3]{-65} \approx \sqrt[3]{-64} \approx -4$
2. $\sqrt[3]{343} < \sqrt[3]{370} < \sqrt[3]{512}$
 $7 < \sqrt[3]{370} < 8$
 Maka/Thus, $\sqrt[3]{370} \approx \sqrt[3]{343} \approx 7$
3. $\sqrt[3]{-27} < \sqrt[3]{-25.9} < \sqrt[3]{-8}$
 $-3 < \sqrt[3]{-25.9} < -2$
 Maka/Thus, $\sqrt[3]{-25.9} \approx \sqrt[3]{-27} \approx -3$

C

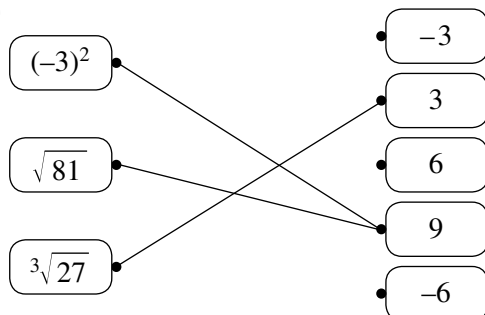
1. 27 2. 8 cm

Muka Surat 35

1. 5 2. 9 3. $-\frac{1}{125}$
 4. 4 5. -0.0096 6. -80
 7. $-30\frac{1}{3}$ 8. -288 9. $-1\frac{1}{9}$

Praktis PT3

1. (a)



(b) $\left(\sqrt{2\frac{7}{9}} + \sqrt[3]{\frac{8}{27}}\right)^2 = \left(\sqrt{\frac{25}{9}} + \frac{2}{3}\right)^2$
 $= \left(\frac{5}{3} + \frac{2}{3}\right)^2$
 $= \left(\frac{7}{3}\right)^2$
 $= \frac{49}{9}$

(c) 999 cm^3

2. (a) (i) 0.027 (ii) $\frac{27}{125}$ (iii) $-3\frac{3}{8}$
 (b) (i) 0.16 (ii) $-\frac{3}{10}$
 (c) 16 cm

FOKUS KBAT

1. $\sqrt{534} + \sqrt{5\ 340}$
 $= \sqrt{5.34 \times 100} + \sqrt{53.4 \times 100}$
 $= (\sqrt{5.34} \times \sqrt{100}) + (\sqrt{53.4} \times \sqrt{100})$
 $= (2.31 \times 10) + (7.31 \times 10)$
 $= 23.1 + 73.1$
 $= 96.2$
2. 384 cm^2

BAB 4: NISBAH, KADAR DAN KADARAN**Muka Surat 39****A**

1. 7 : 9 : 14 2. 5 : 8 : 30 3. 2 : 3 : 10

B

1. Tidak setara/Not equivalent
 2. Setara/Equivalent

C

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

Muka Surat 40**A**

1. $\frac{64\text{ cm}}{8\text{ saat}}$, Jarak dan masa
Distance and time
2. $\frac{\text{RM}3}{2\text{ kg}}$, Jumlah wang dan jisim
Total amount of money and mass
3. $\frac{12\text{ km}}{1\text{ liter}}$, Jarak dan isi padu
Distance and volume
4. $\frac{6\text{ m/s}}{3\text{ saat}}$, Laju dan masa
Speed and time

B

1. RM48 per kg 2. 25 m/s
 3. 8.3 g per cm^3

Muka Surat 41**A**

1. $\frac{30\text{ minit}}{10\text{ pusingan}} = \frac{45\text{ minit}}{15\text{ pusingan}}$
 $\frac{30\text{ minutes}}{10\text{ laps}} = \frac{45\text{ minutes}}{15\text{ laps}}$
2. $\frac{\text{RM}12}{5\text{ kg}} = \frac{\text{RM}24}{10\text{ kg}}$

B

1. 20 liter/litres 2. 150
 3. 18

Muka Surat 42

A

- 144 biji butang/*buttons*
- 625 buah kerusi/*chairs*

B

- 24
- 22.5 m

Muka Surat 43

A

- 3 : 4 : 9
- 21 : 30 : 16
- 20 : 24 : 33

B

- 6 : 15 : 5
- 6 : 10 : 9

Muka Surat 44

- 24 cm
- 28 cm
- RM2.60
- 15 cm
- RM1 440

Muka Surat 45

- RM285
- $13\frac{1}{3}$ jam/*hours*
- 10 minit/*minutes*
- 1 150 liter/*litres*
- 207 kalori/*calories*

Muka Surat 46

- 152
- 5 m
- (a) 12
(c) 15
- (b) 5 : 3

Muka Surat 47

A

- 45 : 100
- 0.6 : 100
- 89 : 100

B

- 25%
- 35%
- 44%

BAB 5: UNGKAPAN ALGEBRA

Muka Surat 51

A

Situasi <i>Situation</i>	Pemboleh ubah/ <i>Variable</i>		
	Huruf <i>Letter</i>	Nilai yang tetap <i>Fixed value</i>	Nilai yang berubah <i>Varied value</i>
1. Isi padu petrol yang digunakan oleh sebuah kereta setiap hari. <i>The volume of petrol used by a car every day.</i>	<i>p</i>		✓ Isi padu petrol yang digunakan berubah setiap hari. <i>The volume of petrol consumed changes every day.</i>
2. Umur Zarina pada dua tahun yang akan datang. <i>Zarina's age in the next two years.</i>	<i>k</i>	✓ Umur Zarina pada dua tahun yang akan datang adalah tetap. <i>Zarina's age in two year time is fixed.</i>	
3. Bil elektrik bulanan rumah Puan Aini. <i>The monthly electricity bill of Puan Aini's household.</i>	<i>b</i>		✓ Bil elektrik berubah setiap bulan. <i>The electricity bill changes every month</i>

C

- 90%
- 52%
- 15%

Muka Surat 48

- (a) 25%
(b) Pecahan/*Fraction*: $\frac{23}{50}$
Perpuluhan/*Decimal*: 0.46
Peratusan/*Percentage*: 46%
- (a) 35
(b) 7 : 9
(c) Vinu $\rightarrow \frac{7}{5 + 4 + 7} \times 112 = 49$
Bala $\rightarrow \frac{3}{3 + 1 + 2} \times 108 = 54$

Maka, Bala ialah juara individu bagi pertandingan kuiz itu dengan skor tertinggi, iaitu 54.

Thus, Bala is the individual champion in the quiz competition with the highest score of 54.

Praktis PT3

- (a) (i) > (ii) < (iii) =
(b) (i) 10 (ii) 6 : 15 : 5
(c) 15
- (a) (i) 2 : 3 (ii) 2 : 1
(b) (i) 10° (ii) Zainal
(c) (i) 2 : 3 (ii) 18

FOKUS KBAT

RM4 400

4. Jarak di antara rumah Saiful dengan sekolahnya. <i>The distance between Saiful's house and his school.</i>	d	✓ Jarak di antara rumah Saiful dengan sekolahnya sentiasa sama. <i>The distance between Saiful's house and his school is always the same.</i>
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B

1. $hk + 5$ 2. $\frac{t-9}{4}$ 3. $2x - 7$ 4. $3y + 2$

Muka Surat 52

A

1. -10 2. 8 3. 12 4. 12 5. -35

B

1. (a) $2h - k$ (b) 315 cm
2. (a) $300 - 28m - nr$ (b) RM22

Muka Surat 53

A

1. $15w, 3$ 2. $12p, \frac{ps}{5}$
3. $7u, s, 0.8uw$ 4. $\frac{1}{2}k, 6h^2k, 1$
5. $\frac{2m}{3}, 8mn, 4k^2, 5n$

B

1. $-5p$ 2. qr 3. $-5q^2$ 4. $-pqr$ 5. $5q^2r$

C

1. ✓ 2. ✓ 3. ✓ 4. ✗ 5. ✓
6. ✗

D

1. $-4qr, 3qr$ 2. $8rst, 0.3rst$
3. $-7m^2n, 2m^2n$

Muka Surat 54

A

1. $5k - 3h$ 2. $-x + 2y$
3. $14pq - 3rs + 7$ 4. $7mn - 2h - 9$
5. $\frac{3}{8}cd - 8xy$

B

1. $(hk)^4$ 2. $(3 - 5r)^2$
3. $(ab + 2c - 9)^3$

C

1. $p \times p \times p \times p \times p$
2. $ab \times ab \times ab$
3. $(4x + 3y) \times (4x + 3y)$
4. $(d - 4e) \times (d - 4e) \times (d - 4e)$
5. $(1 + 9n) \times (1 + 9n) \times (1 + 9n) \times (1 + 9n)$

Muka Surat 55

A

1. $-7r^2s^2t$ 2. $10x^3y^2z$ 3. $9cd^5e^2$

B

1. $2hk$ 2. $\frac{3rt}{2s}$ 3. $-\frac{5q^3r}{2p}$

C

1. $\frac{bcd}{2}$ 2. $-4fg^2h$

Praktis PT3

1. (a) (i) $7pqr$ $5p - 2q + r$ $4pq - r$

(ii) $-7nm$ $\frac{mn}{2}$ $\frac{5m}{n}$

(iii) $3n - p$

- (b) (i) $\frac{p}{x}$ (ii) $\frac{q}{y}$ (iii) $\frac{3p}{x} + \frac{2q}{y}$
(c) $15p - q$

2. (a)

$\frac{r^2s}{3}, 5rs, 0.4r^2s, \frac{2}{r^2s}, -sr^2, 3rs^2$

(b) (i) $\frac{5p^2r}{q}$ (ii) -3

(c) (i) $7pq - qr$ (ii) 265

FOKUS KBAT

$6(2 + 5p)^2$

SOALAN-SOALAN BERORIENTASIKAN PISA

(a) $50 + 4n$

Minggu (n) Weeks	Jumlah simpanan (RM) Total savings
5	$50 + 4(5) = 70$
10	$50 + 4(10) = 90$
20	$50 + 4(20) = 130$

(c) Selepas 20 minggu, hanya terdapat RM130 wang simpanan. Wang itu tidak mencukupi untuk Azuan membeli papan luncur kerana papan luncur itu berharga RM145.

After 20 weeks, Azuan's saving is only RM130. The money is not enough to buy a skateboard because the skateboard costs RM145.

BAB 6: PERSAMAAN LINEAR

Muka Surat 59

A

$$5 + y = 9, 6h - \frac{1}{2} = h, \frac{m}{2} - 5 = 3, 2(k - 3) = \frac{k}{2}$$

B

$$1. 9 + 5x = 28 \qquad 2. x + 15 = 60$$

$$3. n + 2 = 17$$

C

$$1. x = 6 \qquad 2. y = 8 \qquad 3. m = 8$$

$$4. p = 5 \qquad 5. x = 1 \qquad 6. n = 15$$

Muka Surat 60

A

$$1. q = \frac{8}{5} \qquad 2. y = 2 \qquad 3. m = 9$$

$$4. x = 18 \qquad 5. k = 23$$

B

$$1. 10$$

$$2. 8 \text{ tahun/years old}$$

Muka Surat 61

A

$$5x = 6 + y, a + 7 = 3b, m - 4n = 8$$

$$\frac{r}{5} + 2 = s - 10, 8u - 1 = v, 2x = 5 + y$$

B

$$1. x + \frac{y}{4} = 30 \qquad 2. 4x + 2y = 16$$

$$3. y - x = 5$$

C

$$1. x = 0, y = 7 \text{ dan/and } x = 1, y = 6$$

$$2. p = 0, q = 3 \text{ dan/and } p = 1, q = 8$$

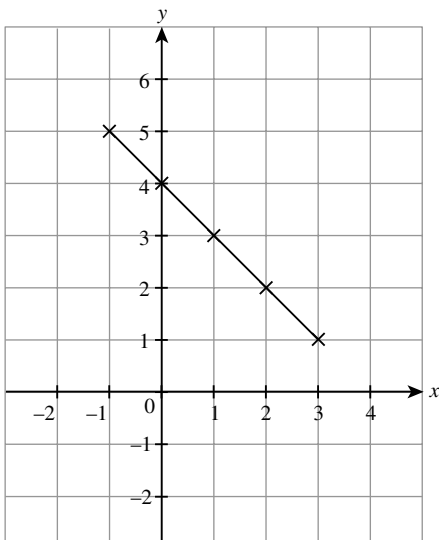
$$3. r = 0, s = 6 \text{ dan/and } r = 2, s = 5$$

Muka Surat 62

A

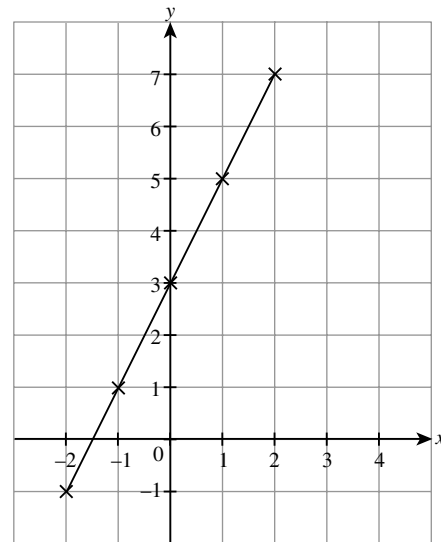
$$1. x + y = 4$$

x	-1	0	1	2	3
y	5	4	3	2	1



$$2. y = 2x + 3$$

x	-2	-1	0	1	2
y	-1	1	3	5	7



B

1. Andaikan umur mereka ialah x dan y di mana y ialah umur adik.

Let their ages be x and y where y is the age of the younger brother.

$$x + y = 28 \quad \dots \textcircled{1}$$

$$x - y = 2 \quad \dots \textcircled{2}$$

$$2. \qquad \qquad \qquad 3x + y = 10 \quad \dots \textcircled{1}$$

$$3x + y + 10 + x + 4y = 32$$

$$4x + 5y = 22 \quad \dots \textcircled{2}$$

Muka Surat 63

$$1. x = 3, y = -1$$

$$2. x = -1, y = 5$$

$$3. x = 4, y = 7$$

$$4. x = 2, y = -2$$

$$5. x = -1, y = 2$$

Muka Surat 64

$$1. x = 2, y = -2$$

$$2. p = 11, q = 3$$

$$3. r = 1, s = 1$$

$$4. v = 1, u = 2$$

$$5. x = 2, y = -2$$

Muka Surat 65

$$1. \text{ Daud: } 18, \text{ Jerry: } 12$$

$$2. \text{ Fatin: } 31 \text{ kg, Hanim: } 37 \text{ kg}$$

$$3. \text{ Buku/Book: RM25, Pen/Pen: RM30}$$

Praktis PT3

$$1. (a) m - 5 = 6, \frac{m}{5} = -3, 3t = 1 - t$$

$$(b) (i) x = 3 \qquad (ii) n = -5$$

$$(c) (i) y = -4 \qquad (ii) 9 \text{ cm}$$

$$2. (a) (i) 6 \qquad (ii) 3 \qquad (iii) -\frac{2}{3}$$

$$(b) p = -22, q = 37$$

$$(c) (i) \qquad x + y = 100 \quad \dots \textcircled{1}$$

$$1.2x + 2y = 152 \quad \dots \textcircled{2}$$

$$(ii) x = 60, y = 40$$

FOKUS KBAT

- $x = 70^\circ$, $y = 52^\circ$
- Daniel: 6 tahun/years old
Ayah Daniel/Daniel's father: 30 tahun/years old

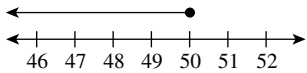
BAB 7: KETAKSAMAAN LINEAR**Muka Surat 69****A**

- $0 \boxed{>} -1$
0 lebih besar daripada/is greater than -1 .
- $\frac{1}{6} \boxed{<} \frac{1}{5}$
 $\frac{1}{6}$ kurang daripada/is less than $\frac{1}{5}$.
- $0.58 \boxed{>} 0.508$
0.58 lebih besar daripada/is greater than 0.508.
- $3^2 \boxed{>} \sqrt{64}$
 3^2 lebih besar daripada/is greater than $\sqrt{64}$.
- $0.7 \text{ m} \boxed{<} 75 \text{ cm}$
0.7 m kurang daripada/is less than 75 cm.

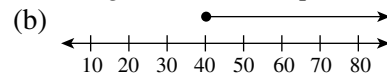
B

- (a) 2 kurang daripada k atau k lebih besar daripada 2.
 2 is less than k or k is greater than 2.
(b) $2 < k$ atau/or $k > 2$
- (a) m kurang daripada 5 atau 5 lebih besar daripada m .
 m is less than 5 or 5 is greater than m .
(b) $m < 5$ atau/or $5 > m$
- (a) 9 kurang daripada x atau x lebih besar daripada 9.
 9 is less than x or x is greater than 9.
(b) $9 < x$ atau/or $x > 9$
- (a) 11 kurang daripada w atau w lebih besar daripada 11.
 11 is less than w or w is greater than 11.
(b) $11 < w$ atau/or $w > 11$
- (a) p kurang daripada 14 atau 14 lebih besar daripada p .
 p is less than 14 or 14 is greater than p .
(b) $p < 14$ atau/or $14 > p$
- (a) y kurang daripada -3 atau -3 lebih besar daripada y .
 y is less than -3 or -3 is greater than y .
(b) $y < -3$ atau/or $-3 > y$

Muka Surat 70

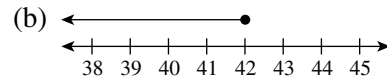
- (a) y kurang daripada atau sama dengan 50.
 y is less than or equal to 50.
(b) 
(c) $y \leq 50$

- (a) x lebih besar daripada atau sama dengan 40.
 x is greater than or equal to 40.



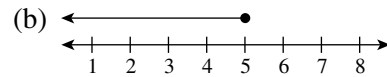
- (c) $x \geq 40$

- (a) p kurang daripada atau sama dengan 42.
 p is less than or equal to 42.



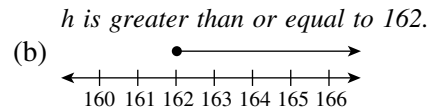
- (c) $p \leq 42$

- (a) m kurang daripada atau sama dengan 5.
 m is less than or equal to 5.



- (c) $m \leq 5$

- (a) h lebih besar daripada atau sama dengan 162.
 h is greater than or equal to 162.



- (c) $h \geq 162$

Muka Surat 71**A**

- $0 > -5$
- $-2 < 7$
- $1 > 0.8$
- $-4 > -7$

B

- $-9 < 7$
- $-13 < -2$
- $\frac{3}{8} < \frac{5}{6}$
- $-2 < 5.1$

C

- (a) $>$ (b) $>$ (c) $>$
- (a) $<$ (b) $<$ (c) $<$
- (a) $>$ (b) $>$ (c) $>$
- (a) $<$ (b) $>$ (c) $>$
- (a) $>$ (b) $<$ (c) $<$
- (a) $<$ (b) $>$ (c) $>$
- (a) $<$, $<$
- (a) $<$, $<$

Muka Surat 72**A**

- $p > 120$
- $d < 500$
- $y \geq 85$

B

- Perbelanjaan bulanan Shima melebihi RM800.
The monthly expenditure of Shima is more than RM800.
- Panjang segulung tali kurang daripada 6 m.
The length of a roll of string is less than 6 m.
- Isi padu air di dalam sebuah bekas tidak melebihi 500 cm^3 .
The volume of water in a container is not more than 500 cm^3 .
- Umur seorang pekerja di sebuah syarikat kurang daripada 56 tahun.
The age of a worker in a company is less than 56 years old.

5. Jordan berkhidmat secara sukarela sekurang-kurangnya 9 jam dalam masa seminggu.
Jordan does volunteer work at least 9 hours in one week.

Muka Surat 73

1. $k < -8$
2. $m \leq 7$
3. $p > 5$
4. $h < -9$
5. $z \geq -12$
6. $r < 7$
7. $w > 24$
8. $y \geq -15$
9. $k < -20$
10. $t \geq 6$
11. $x < -3$
12. $y < 6$

Muka Surat 74

1. 9 kotak/boxes
2. 16 guni/sacks
3. 5 hiris/slices

Muka Surat 75

1. $-1 \leq x < 5$
2. $-3 < x \leq 2$
3. $-2 \leq x \leq 7$
4. $-5 < x \leq 6$
5. $-10 < x < -4$

Praktis PT3

1. (a) (i) \leq (ii) \geq (iii) \leq
 (b) (i) 5 (ii) $y = 2, 3, 5, 7, 11$
 (c) $x = 4, 5, 6$
2. (a) (i) K (ii) J (iii) L
 (b) (i) (a) $6 > 3$ (b) $-12 < -7$
 (ii) $k = 4$
 (c) 8

FOKUS KBAT

Farid dapat menanam selebih-lebihnya 8 batang pokok rambutan dan sekurang-kurangnya 10 batang pokok durian.

Farid can plant not more than 8 rambutan trees and at least 10 durian trees.

BAB 8: GARIS DAN SUDUT

Muka Surat 78

- A**
1. $JK \neq PQ$, Tidak kongruen/Not congruent
 2. $JK = PQ$, Kongruen/Congruent
 3. $JK = PQ$, Kongruen/Congruent

- B**
1. $\angle RST = \angle XYZ$, Kongruen/Congruent
 2. $\angle RST \neq \angle XYZ$, Tidak kongruen/Not congruent
 3. $\angle RST = \angle XYZ$, Kongruen/Congruent

Muka Surat 79

- A**
1. 2.4 cm
 2. 4.8 cm
- B**
1. 75°
 2. 160°
 3. 110°
 4. 45°

Muka Surat 80

- A**
1. Sudut pada garis lurus
Angle on a straight line
 2. Sudut putaran lengkap
Angle of one whole turn
 3. Sudut refleks
Reflex angle

- B**
1. BENAR/TRUE
 2. PALSU/FALSE
 3. BENAR/TRUE

- C**
1. 60°
 2. 76°

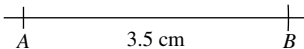
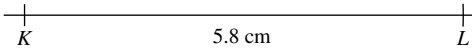
- D**
1. 135°
 2. 77°

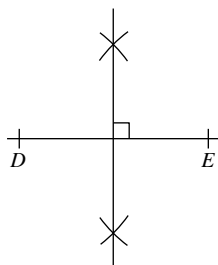
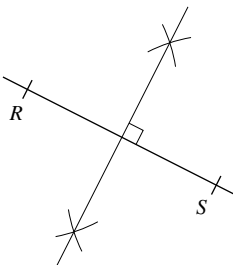
- E**
1. 240°
 2. 125°

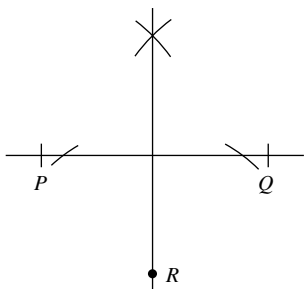
Muka Surat 81

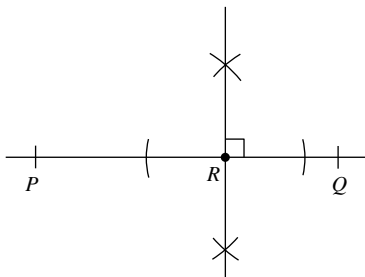
1. $w = 52^\circ, x = 38^\circ, y = 84^\circ, z = 58^\circ$
2. $h = 57^\circ, k = 33^\circ$
3. $x = 45^\circ, y = 135^\circ$

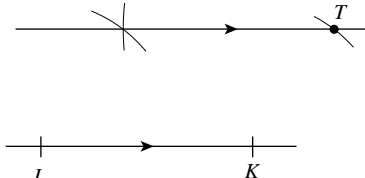
Muka Surat 82

- A**
1. 
 2. 

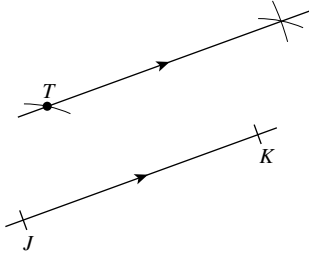
- B**
1. 
 2. 

- C**
1. 

2. 

- D**
1. 

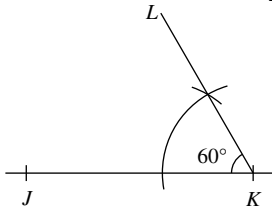
2.



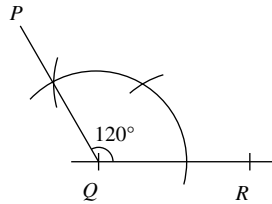
Muka Surat 83

A

1.

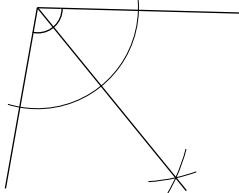


2.

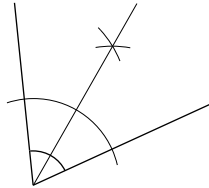


B

1.

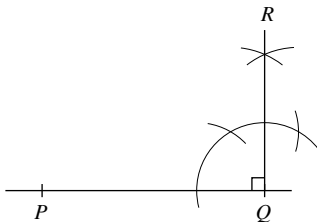


2.

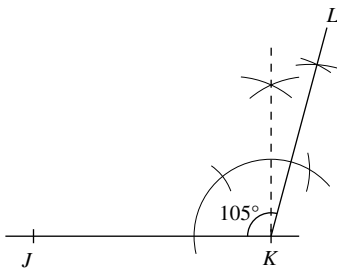


C

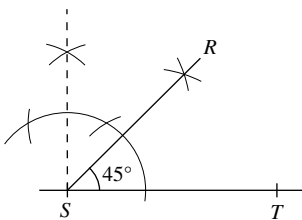
1.



2.



3.



Muka Surat 84

A

Sudut bertentang bucu <i>Vertically opposite angles</i>	Sudut bersebelahan <i>Adjacent angles</i>
q dan/and u r dan/and t	p dan/and q p dan/and u r dan/and s s dan/and t

B

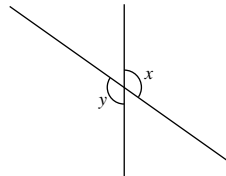
1. ✓

2. ✓

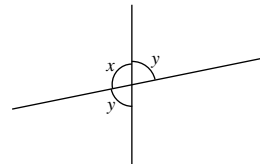
3. ✗

C

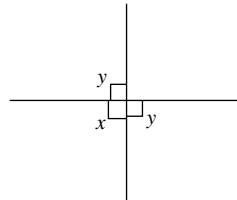
1.



2.



3.



Muka Surat 85

A

1. $x = 35^\circ, y = 98^\circ$

2. $x = 67^\circ, y = 48^\circ$

3. $x = 127^\circ, y = 116^\circ$

B

1. $x = 36^\circ, y = 27^\circ$

2. $x - y = 132^\circ - 14^\circ = 118^\circ$

Muka Surat 86

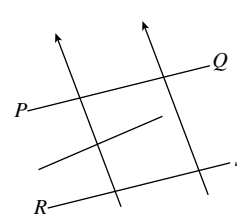
A

1. Garis selari/Parallel lines: AB dan/and EF
Garis rentas lintang/Transversal: GH

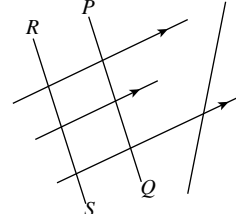
2. Garis selari/Parallel lines: PQ, RS dan TU
Garis rentas lintang/Transversal: VW dan XY

B

1.



2.



C

1. KL bersilang dengan satu garis lurus sahaja.
Maka, KL bukan garis rentas lintang.
*KL intersects one straight line only.
Thus, KL is not a transversal.*

2. KL bersilang dengan tiga garis lurus.
Maka, KL ialah garis rentas lintang.
*KL intersects three straight lines.
Thus, KL is a transversal.*

Muka Surat 87

A

1. Sudut selang-seli/*Alternate angles*
2. Sudut pedalaman/*Interior angles*
3. Sudut sepadan/*Corresponding angles*

B

1. b
2. a

C

1. p
2. q

D

1. q, s
2. t, v

Muka Surat 88

A

1. Tidak selari/*Not parallel*
2. Tidak selari/*Not parallel*
3. Selari/*Parallel*

B

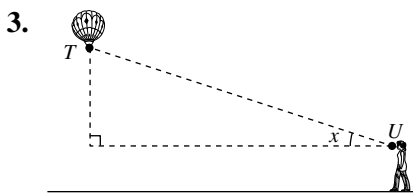
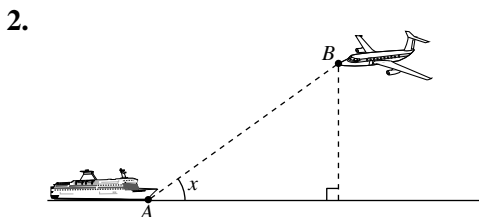
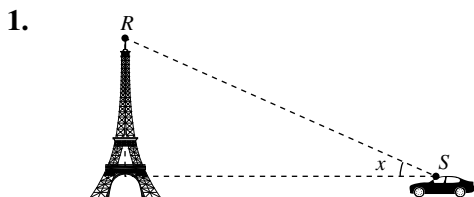
1. $x + 98^\circ = 180^\circ$
 $x = 82^\circ$
 $x = 82^\circ$ (sudut selang-seli/*alternate angles*)
Maka, PQ dan RS adalah selari.
Thus, PQ and RS are parallel.
2. $x + 72^\circ = 180^\circ$
 $x = 108^\circ$
 $x = 108^\circ \neq 118^\circ$
Maka, PQ dan RS adalah tidak selari.
Thus, PQ and RS are not parallel.

C

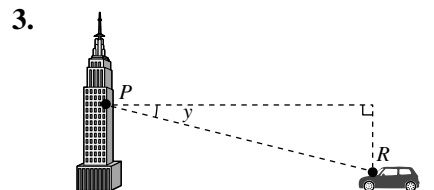
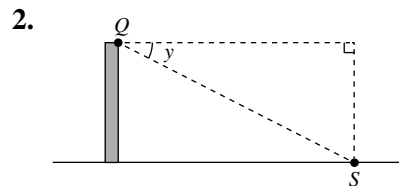
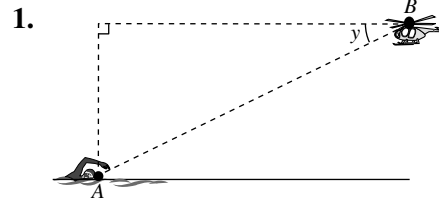
1. $x = 86^\circ, y = 102^\circ, z = 94^\circ$
2. $x = 36^\circ, y = 28^\circ, z = 128^\circ$

Muka Surat 89

A



B



Muka Surat 90

1. (a) $m = 85^\circ$ (b) 48°
2. (a) 34° (b) 42°
3. $x + y = 115^\circ + 37^\circ = 152^\circ$

Praktis PT3

1. (a) (i) Sudut penggenap/*Supplementary angle*
(ii) Sudut konjugat/*Conjugate angle*
(iii) Sudut pelengkap/*Complementary angle*
(b) (i) $x = 110^\circ$ (ii) 50°
(c) $x + y = 65^\circ + 140^\circ = 205^\circ$
2. (a) (i) s, t (ii) q, u (iii) p, r
(b) (i) (a) $\angle RPS$ atau/ $\angle SPR$
(b) $\angle PSQ$ atau/ $\angle QSP$
(ii) $x = 64^\circ$
(c) $m + n = 76^\circ + 22^\circ = 98^\circ$

FOKUS KBAT

1. $x = 95^\circ$
2. $x = 75^\circ, y = 285^\circ$

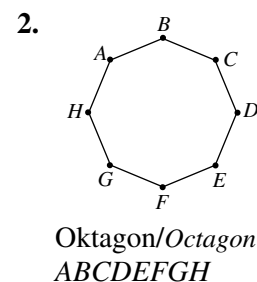
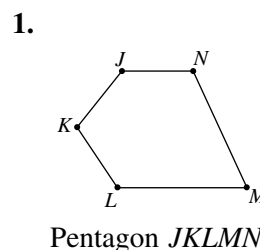
BAB 9: POLIGON ASAS

Muka Surat 93

A

1. 3, 3, 0
2. 4, 4, 2
3. 5, 5, 5
4. 6, 6, 9
5. sama/equal
6. $\frac{n(n-3)}{2}$

B



Muka Surat 94

A

1. Segi tiga tak sama kaki
Scalene triangle

- Tidak mempunyai sisi yang sama.
No equal sides.
- Tiada paksi simetri.
No axes of symmetry.
- Ketiga-tiga sudut berlainan.
All the three angles are different.

2. Segi tiga sama kaki
Isosceles triangle

- 2 sisi sama panjang.
2 equal sides.
- 1 paksi simetri.
1 axis of symmetry.
- 2 sudut tapak adalah sama.
2 base angles are equal.

3. Segi tiga sama sisi
Equilateral triangle

- 3 sisi sama panjang.
3 equal sides.
- 3 paksi simetri.
3 axes of symmetry.
- Semua sudut ialah 60° .
All angles are 60° .

B

1. Segi tiga bersudut tirus
Acute-angled triangle

Semua sudut ialah sudut tirus.
All angles are acute.

2. Segi tiga bersudut tegak
Right-angled triangle

Salah satu sudut ialah sudut tegak.
One of the angles is a right angle.

3. Segi tiga bersudut cakah
Obtuse-angled triangle

Salah satu sudut ialah sudut cakah.
One of the angles is an obtuse angle.

Muka Surat 95

A

1. a, b, c 2. x 3. 180°
4. 180° 5. $x = a + b$

B

1. $x = 29^\circ$ 2. $x = 35^\circ$ 3. $x = 115^\circ$ 4. $x = 25^\circ$

Muka Surat 96

1. $x = 50^\circ$ 2. $x = 72^\circ$
3. $x = 75^\circ, y = 23^\circ$ 4. $x = 76^\circ, y = 139^\circ$

Muka Surat 97

1. Segi empat selari
Parallelogram

- Sisi bertentangan adalah sama panjang.
The opposite sides are equal length.
- Sudut bertentangan adalah sama.
The opposite angles are equal.

2. Segi empat tepat
Rectangle

- Sisi bertentangan adalah sama panjang.
The opposite sides are equal length.
- Mempunyai 4 sudut tegak.
Has 4 right angles.

3. Rombus/Rhombus

- 4 sisinya adalah sama panjang.
Its 4 sides are equal length.
- Sudut bertentangan adalah sama.
The opposite angles are equal.

4. Segi empat sama/Square

- 4 sisinya adalah sama panjang.
Its 4 sides are equal length.
- Mempunyai 4 sudut tegak.
Has 4 right angles.

5. Trapezium/Trapezium

- Mempunyai hanya 1 pasangan garis selari.
Has only 1 pair of parallel sides.

6. Lelayang/Kite

- Dua pasang sisi bersebelahan adalah sama panjang.
Two pairs of adjacent sides are equal length.
- Sepasang sudut bertentangan adalah sama.
One pair of opposite angles is equal.

Muka Surat 98

1. $x = 40^\circ, y = 32^\circ$ 2. $x = 60^\circ, y = 127^\circ$
3. $x = 85^\circ, y = 135^\circ$ 4. $x = 100^\circ, y = 105^\circ$
5. $x = 89^\circ, y = 64^\circ$

Muka Surat 99

- $x = 45^\circ, y = 103^\circ$
- $x = 122^\circ, y = 148^\circ$
- $x = 162^\circ, y = 126^\circ$

Muka Surat 100

- $x = 93^\circ, y = 87^\circ$
- $x = 23^\circ, y = 70^\circ$
- $x = 68^\circ, y = 34^\circ$

Praktis PT3

- (a) (i) 6 (ii) 6 (iii) 9
 (b) (i) $x = 59^\circ, y = 134^\circ$
 (ii) $x = 36^\circ, y = 18^\circ$
 (c) $x = 85^\circ, y = 25^\circ$

FOKUS KBAT

- $x = 18^\circ, y = 40^\circ$
- $x = 120^\circ, y = 35^\circ$

BAB 10: PERIMETER DAN LUAS

Muka Surat 103

- 52 cm
- 64 cm
- 62 cm
- 35 cm
- 25 cm

Muka Surat 104

A

- 10 cm
- 11 cm

B

- 5 cm
- RM4 510

Muka Surat 105

A

25, 10, 35

B

- 30 cm²
- 49 cm²
- 45 cm²

C

- 6
- 10

Muka Surat 106

A

- 77 cm²
- 45 mm²
- 111 cm²

B

- 6
- 7.5
- 13

Muka Surat 107

A

- 476 cm²
- 110 cm²
- 2.7 m²

B

- 5 cm
- 32 cm

Muka Surat 108

A

- 210 cm²
- 77 cm²
- 72 cm²

B

- 6
- 17

Muka Surat 109

- 1 050 m²
- 495 m²
- 53 cm²

Muka Surat 110

A

Rajah Diagram	Perimeter	Luas Area	Beza antara panjang dan lebar Difference between the length and the width
P	16 cm	12 cm ²	4 cm
Q	16 cm	7 cm ²	5 cm
R	16 cm	16 cm ²	0 cm
S	16 cm	15 cm ²	2 cm

- kecil/smaller
- segi empat sama/square

B

Rajah Diagram	Perimeter	Luas Area	Beza antara panjang dan lebar Difference between the length and the width
W	30 cm	36 cm ²	9 cm
X	24 cm	36 cm ²	0 cm
Y	26 cm	36 cm ²	5 cm
Z	40 cm	36 cm ²	16 cm

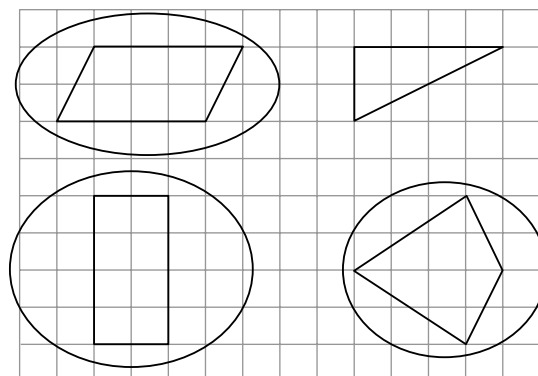
- besar/larger
- segi empat sama/square

Muka Surat 111

- 177 m
- (a) 144 cm²
(b) 56 cm
- 157.5 cm²

Praktis PT3

- (a) 46 cm
(b) 135 cm
(c) (i) 256 m²
(ii) RM7 168
- (a)



- (b) 123 cm²
(c) 126 cm²

FOKUS KBAT

232 cm²

BAB 11: PENGENALAN SET

Muka Surat 114

A

Bunga/Flower	Sayur-sayuran/Vegetable	Buah-buahan/Fruit
orkid/orchid lavender ros/rose	kubis/cabbage timun/cucumber bayam/spinach	betik/papaya nanas/pineapple tembikai/watermelon

B

Set Set	Perihal Description	Penyenaraian Listing	Tatatanda pembina set Set builder notation
1. Warna lampu isyarat Colours of traffic light	P ialah set warna lampu isyarat. P is the set of colours of traffic light.	$P = \{\text{merah, kuning, hijau}\}$ $P = \{\text{red, yellow, green}\}$	$P = \{x : x \text{ ialah warna lampu isyarat}\}$ $P = \{x : x \text{ is a colour of traffic light}\}$
2. Huruf vokal Vowels	Q ialah set huruf vokal. Q is the set of vowels.	$Q = \{a, e, i, o, u\}$	$Q = \{x : x \text{ ialah huruf vokal}\}$ $Q = \{x : x \text{ is a vowel}\}$
3. Faktor bagi 6 Factors of 6	S ialah set faktor bagi 6. S is the factors of 6.	$S = \{1, 2, 3, 6\}$	$S = \{x : x \text{ ialah faktor bagi 6}\}$ $S = \{x : x \text{ is a factor of 6}\}$

C

1. Benar/True 2. Palsu/False 3. Palsu/False

Muka Surat 115

A

1. (a) \in (b) \notin (c) \notin (d) \in
2. (a) \in (b) \in (c) \notin (d) \notin

B

1. 6 2. 6 3. 4 4. 5 5. 4

C

1. Set sama/Equal set
2. Bukan set sama/Not equal set
3. Bukan set sama/Not equal set
4. Set sama/Equal set

Muka Surat 116

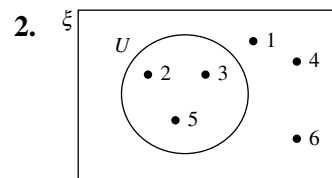
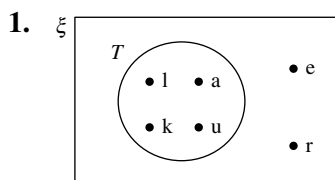
A

1. Ya/Yes 2. Bukan/No
3. Ya/Yes 4. Bukan/No

B

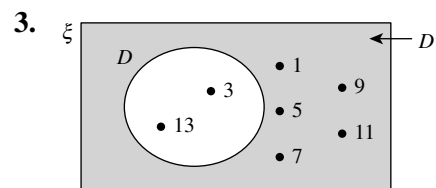
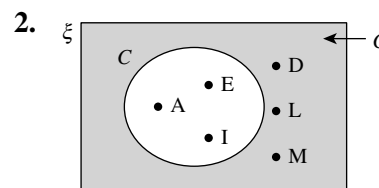
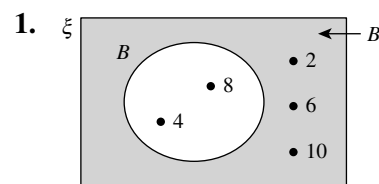
1. $B' = \{k, l, p, q, t\}$
2. $Q' = \{1, 6, 18\}$
3. $R' = \{12, 14, 15, 16, 18\}$

C



Muka Surat 117

A



B

1. \subset 2. $\not\subset$ 3. \subset 4. \subset

Muka Surat 118

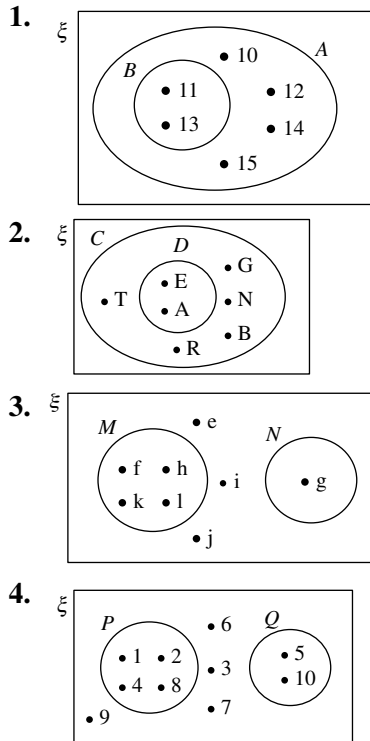
A

1. Benar/True 2. Benar/True 3. Benar/True

B

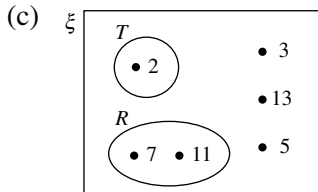
- $\{ \}, \{p\}, \{q\}, \{p, q\}$
- $\{ \}, \{5\}, \{6\}, \{7\}, \{5, 6\}, \{5, 7\}, \{6, 7\}, \{5, 6, 7\}$
- $\{ \}, \{O\}, \{\Delta\}, \{O, \Delta\}$

C

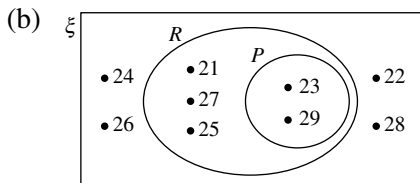


Praktis PT3

- \in
 - $P = \{2, 3, 5, 7\}$
 - $G \subset F$
 - $\{1, 2, 3\}$
 - $\{1, 2, 3, 7\}$
 - 6



- ✓
 - ✗
 - ✓
 - $\{\text{Mac/March, Mei/May}\}$
 - $\{ \}, \{\text{Mac/March}\}, \{\text{Mei/May}\}, \{\text{Mac/March, Mei/May}\}$
- Bilangan unsur bagi set semesta ialah 7. *The number of elements of the universal set is 7.*
 - Set R bukan subset bagi set S. *Set R is not a subset of set S.*
 - T ialah unsur bagi set P. *T is an element of set P.*
- \in
 - \notin
 - \in



- (c) $D = \{2, 4, 6, 8, 10, 12, 14\}$
 $E = \{1, 2, 7, 14\}$

Maka, unsur-unsur yang ada dalam set D dan E ialah $\{2, 14\}$.

Thus, the elements that are found in sets D and E are $\{2, 14\}$.

FOKUS KBAT

- 22
- 12

BAB 12: PENGENDALIAN DATA

Muka Surat 121

A

- Tinjauan/Survey
- Pemerhatian/Observation
- Eksperimen/Experiment

B

- Data kategori/Categorical data
- Data numerik/Numerical data
- Data numerik/Numerical data
- Data numerik/Numerical data
- Data kategori/Categorical data
- Data kategori/Categorical data

C

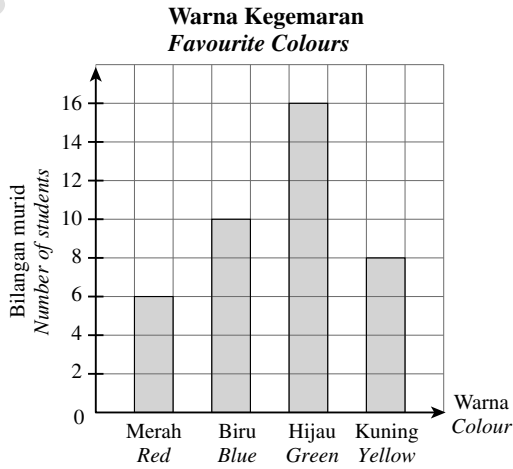
- Gred murid dalam ujian Matematik
Grades of students in a Mathematics Test
- Bilangan gol yang dijangkan
Number of goals scored
- Suhu sebuah bandar dalam sehari
Temperature of a town in a day

Muka Surat 122

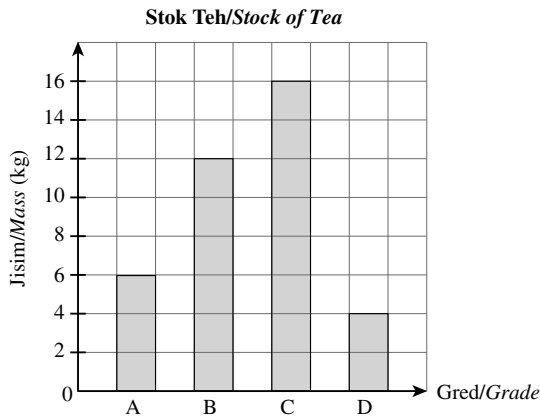
A

Saiz kasut <i>Size of shoes</i>	Gundalan <i>Tally</i>	Kekerapan <i>Frequency</i>
3		1
4		4
5	###	9
6	###	7
7	###	6
8		3
Jumlah Total		30

B
1.



2.

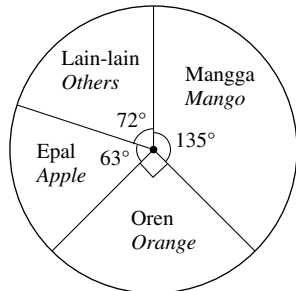


Muka Surat 123

A

135°, 90°, 63°, 72°

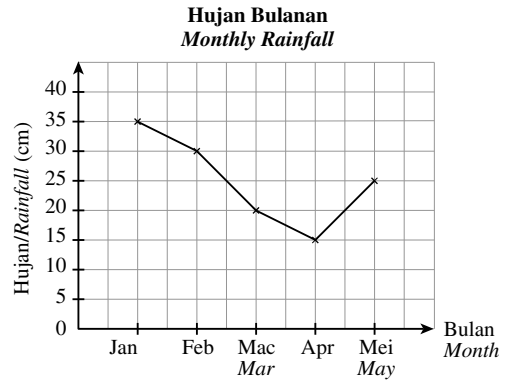
Jus Buah-buahan Kegemaran
Favourite Fruit Juice



B
1.



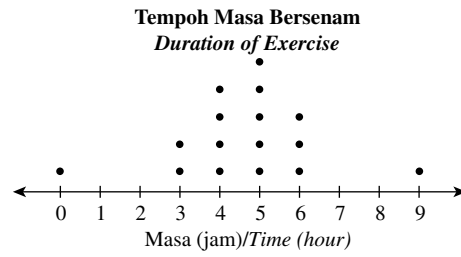
2.



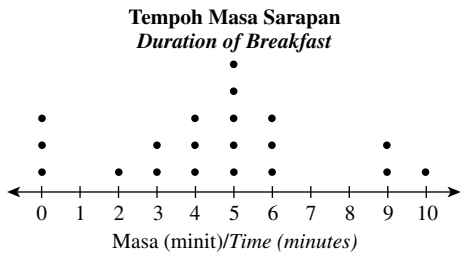
Muka Surat 124

A

1.



2.



B

1.

Markah Ujian Sains
Science Test Marks

Batang Stem	Daun Leaf
3	4
4	
5	2 2 4 8
6	0 1 2 5 5 6 9
7	1 1 3 7 9
8	0 4 8

Kekunci: 5 | 8 bermakna 58 markah.
Key: 5 | 8 means 58 marks.

2.

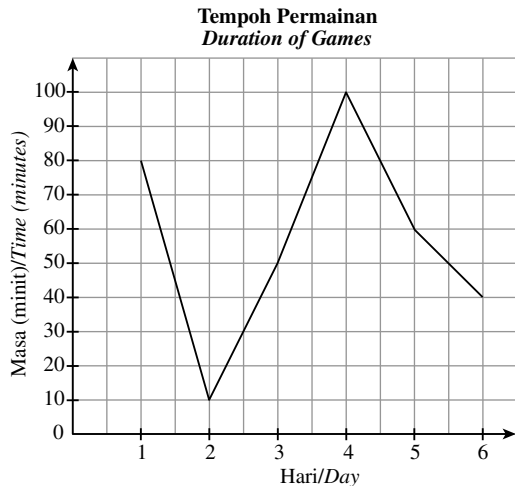
Umur Pembaca Sebuah Majalah
Age of Magazine Readers

Batang Stem	Daun Leaf
2	1 4 9
3	0 0 1 2 3 5 7 8
4	1 3 3 6 6
5	0 0 2 6 7 7 9
6	4

Kekunci: 4 | 3 bermakna 43 tahun.
Key: 4 | 3 means 43 years.

Muka Surat 125

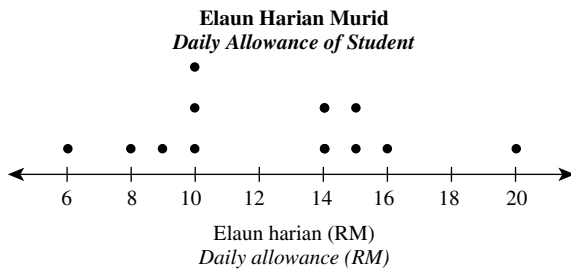
1.



Dapat mengekalkan nilai data asal.
Can maintain the value of the original data.



2.



Memaparkan taburan data numerik.
Display the distribution of numerical data.



Muka Surat 126

- (a) RM68 000
(b) Keuntungan syarikat itu semakin bertambah setiap tahun selepas tahun 2013.
The profits of the company is increasing every year after 2013.
(c) RM75 000
- (a) 150° (b) 420 (c) 70

Muka Surat 127

- (a) 20 orang murid/students
(b) 5 orang murid/students
(c) 3 orang murid/students
(d) Kebanyakan murid membaca 2 buah buku semasa cuti sekolah.
Most of the students read 2 books during the school holiday.
- (a) 26 orang ahli keluarga/family members
(b) 7 orang kanak-kanak/children
(c) 61 tahun/years old
(d) Umurnya adalah jauh beza dengan umur ahli keluarga yang paling tua.
His age is too far from the age of the oldest family members.

Muka Surat 128

- (a) 17 orang murid lelaki/boys
(b) 30%

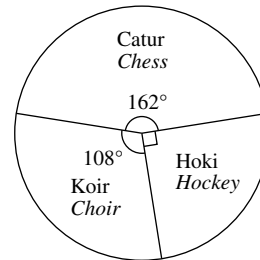
- (c) 3 orang murid lelaki/boys
- (a) 10 bungkusan/parcels
(b) 23 bungkusan/parcels
(c) Kebanyakan bungkusan yang diproses mempunyai jisim 2.0 kg hingga 3.5 kg.
Most of the mass of parcels processed are between 2.0 kg to 3.5 kg.

Muka Surat 129

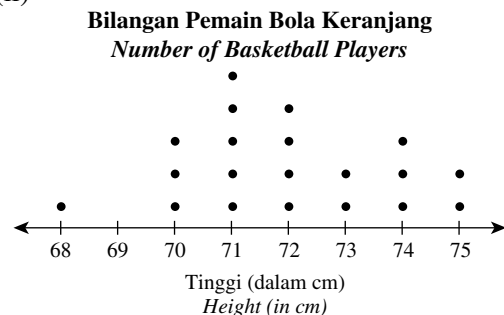
- 50 orang pelajar/Students
- Rajah (b). Tidak beretika. Skala yang digunakan pada paksi mencancang graf garis adalah lebih besar. Pentadbir kolej bercadang untuk meyakinkan orang ramai bahawa kolej ini tidak mengalami isu pendaftaran yang serius.
Diagram (b). Not ethical. The scale used on the vertical axis of this line graph is larger. The college administrator intends to convince the people that the college does not have a serious registration issue.

Praktis PT3

- (a) (i) Eksperimen/Experiment
(ii) Temu bual/Interview
(iii) Pemerhatian/Observation
(b) (i) Catur/Chess
(ii)



- (c) (i) 5 kg
(ii) 6 orang murid/students
(iii) 2 orang murid/students
- (a) Temu bual/Interview
Tinjauan/Survey
Pemerhatian/Observation
(b) (i) B
(ii)



- (c) (i) 8 orang murid/students
(ii) 4 orang murid/students
(iii) Kebanyakan murid mendapat skor 50 hingga 59.
Most of the students obtained scores between 50 to 59.

FOKUS KBAT

- 30 orang murid/*students*
 - Carta palang kerana bilangan murid dinyatakan dengan jelas pada paksi mencancang.
The bar chart because the number of students clearly stated in vertical axis.
 - Tidak sesuai kerana data ini tidak menunjukkan perubahan bilangan murid dalam suatu tempoh masa tertentu.
Not suitable because the data does not show the changes of the number of students in a certain period.
- | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| 32 | 35 | 38 | 38 | 40 | 41 | 42 | 42 | 44 | 45 |
| 48 | 48 | 49 | 50 | 53 | 53 | 54 | 59 | 60 | 60 |
 - 32 minit/*minutes*
 - Masa yang diambil untuk menjawab soalan Matematik kebanyakannya adalah antara 40 minit hingga 49 minit.
The time taken to answer the Mathematics questions mostly between 40 to 49 minutes.

SOALAN-SOALAN BERORIENTASIKAN PISA

Tidak, kerana paksi mencancang tidak bermula daripada sifar tetapi bermula daripada 1 juta. Maka carta palang ini agak mengelirukan dan ketinggian sebenar setiap palang juga tidak ditunjukkan.
No, because the vertical axis does not start from zero but started from 1 million. Thus, the bar chart is misleading and the actual height of each bar is not shown.

BAB 13: TEOREM PYTHAGORAS

Muka Surat 134

- A**
- KM*
 - KM*
 - KM*
- B**
- r*
 - c*
 - x, y*
- C**
- $PR^2 = PQ^2 + QR^2$
 - $KM^2 = KL^2 + LM^2$
 - $ST^2 = RT^2 - RS^2$
 - $AB^2 = AC^2 - BC^2$

Muka Surat 135

- A**
- 10
 - 12
 - 16
- B**
- $y = 15$
 - $y = 12$

Muka Surat 136

- 40 m
- 32 m
- 29 m

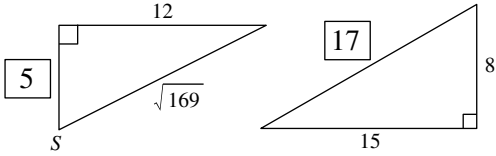
Muka Surat 137

- Ya/*Yes*
- Ya/*Yes*
- Bukan/*No*

Muka Surat 138

- $2.5^2 = 6.25$
 $0.7^2 + 2.4^2 = 0.49 + 5.76$
 $= 6.25$
 $2.5^2 = 0.7^2 + 2.4^2$
 Ya, tiang bendera itu didirikan dengan tegak di atas tanah.
Yes the flagpole is set up at an upright position.
- $200^2 = 40\ 000$
 $160^2 + 140^2 = 25\ 600 + 19\ 600$
 $= 45\ 200$
 $200^2 \neq 160^2 + 140^2$
 Maka, taman itu tidak mempunyai sudut tegak.
Thus, the park does not have a right angle.
- $17^2 = 289$
 $8^2 + 15^2 = 64 + 225$
 $= 289$
 $17^2 = 8^2 + 15^2$
 Ya, gelanggang itu berbentuk segi empat tepat.
Yes, the court is rectangular in shape.

Praktis PT3

- 6
 - 176 cm
 - $x + y = 10 + 9 = 19$
 - XY^2
 - WZ^2
 - XZ^2
 - 24 cm
 - 15 cm
 - 56 cm
- 
 - 28.3 km
 - 400 m
 - $PR^2 = PQ^2 + RQ^2$
 $= 12^2 + 5^2$
 $= 169$
 $PR = \sqrt{169}$
 $= 13$

FOKUS KBAT

- 24.5 cm²
- 4.62 cm