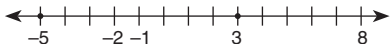
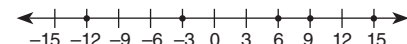
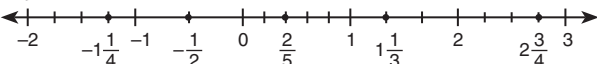


Jawapan

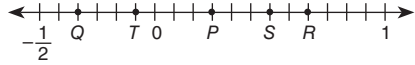
Praktis 1

Praktis Formatif

- 1 A
 2 (a) +35 (b) -62
 3 +15, -3
 4 (a) +80 km (b) -25 km
 5 (a) (i) ✓ (b) -4, 0, 7, +8, -2
 6 (a) 
 (b) (i) Betul/Correct (ii) Salah/Wrong
 (iii) Betul/Correct (iv) Betul/Correct
 7 (a) 
 (b) -12, -3, 6, 9, 15
 8 B
 9 (a) -4 (b) 3 (c) -3 (d) 1
 10 (a) 28 (b) -54 (c) 40 (d) -36
 11 (a) -7 (b) -6 (c) -3 (d) 4
 12 (a) $11 \times (-3) - (+10) \times (-6) = -33 + 60 = 27$
 (b) $[39 - (-26)] \div [(-7) + 2] = 65 \div (-5) = -13$
 13 (a) Hukum kalis tukar tertib
Commutative law
 (b) Hukum kalis agihan
Distributive law
 (c) Hukum identiti
Identity law
 (d) Hukum kalis sekutuan
Associative law
 14 (a) $2\,222 + 888 - 222 - 88 = (2\,222 - 222) + (888 - 88)$
 $= 2\,000 + 800$
 $= 2\,800$
 (b) $12 \times 73 = 12 \times (70 + 3)$
 $= 12 \times 70 + 12 \times 3$
 $= 840 + 36$
 $= 876$
 15 686 m
 16 C
 17 
 $-1\frac{1}{4}, -\frac{1}{2}, \frac{2}{5}, 1\frac{1}{3}, 2\frac{3}{4}$
 18 (a) $\frac{8}{21}$ (b) $\frac{1}{30}$ (c) $2\frac{2}{5}$
 19 (a) -, ÷ (b) ×, +
 20 C
 21 -6.1, -4.73, -2.94, -0.1, 2.36

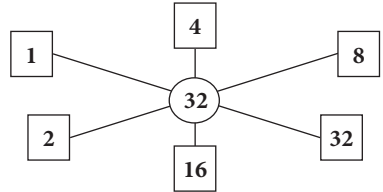
- 22 I 3.71 II -23.37
 III -18.38 IV -26.03
 23 B
 24 25.24
 25 $-5\frac{1}{4}$

Praktis Sumatif

- 1 B 2 D 3 C 4 A 5 A
 6 (a) -20 (b) -9
 7 -31
 8 (c) ✓ (d) ✓
 9 (a) $117 + 46 + 33 + 54 = (117 + 33) + (46 + 54)$
 $= 150 + 100$
 $= 250$
 (b) $11 \times 40 \times 7 \times 25 = (11 \times 7) \times (40 \times 25)$
 $= 77 \times 1\,000$
 $= 77\,000$
 10 $8 \times 495 = 8 \times (500 - 5)$
 $= 4\,000 - 40$
 $= 3\,960$
 11 
 12 $\frac{5}{12}$
 13 (a) 11.2 (b) -7
 14 23.5
 15 (a) E (b) F (c) A (d) B
 (e) C (f) D (g) G

Praktis 2

Praktis Formatif

- 1 B
 2 (a) ✗ (b) ✓
 3 
 4 (a) 3 (b) 3, 7 (c) 3, 5 (d) 2, 3, 7
 5 (a) (i) 20 (ii) 10 (iii) 5
 (b) 2, 5
 6 (a) 2, 3, 7 (b) $2 \times 2 \times 3 \times 3 \times 7$

- 7 (a) (i) 1, 3, 5, 15 (ii) 1, 2, 4, 5, 10, 20
 (iii) 1, 2, 5, 10 (iv) 1, 5, 7, 35
 (b) (i) 1, 2, 5, 10 (ii) 1, 5
 8 (a) 1, 2, 3, 4, 6, 12 (b) 1, 2, 3, 5, 6, 10, 15, 30
 (c) 6

9 (a)
$$\begin{array}{r} 2 \overline{) 18, 72, 90} \\ 3 \overline{) 9, 36, 45} \\ 3 \overline{) 3, 12, 15} \\ 1, 4, 5 \end{array}$$

- (b) 18
 10 12
 11 (a) 3, 6, 9, 12 (b) 84, 119, 154
 12 (a) ✗ (b) ✓ (c) ✗ (d) ✓
 13 (a) (i) 2, 4, 6, 8, 10, 12
 (ii) 4, 8, 12, 16, 20, 24
 (iii) 6, 12, 18, 24, 30, 36
 (b) (i) 4, 8, 12, 16 (ii) 12, 24, 36, 48

14 C

15 (a) (i)
$$\begin{array}{r} 2 \overline{) 4, 9, 12, 15} \\ 2 \overline{) 2, 9, 6, 15} \\ 3 \overline{) 1, 9, 3, 15} \\ 3 \overline{) 1, 3, 1, 5} \\ 5 \overline{) 1, 1, 1, 5} \\ 1, 1, 1, 1 \end{array}$$

- (ii) 180
 (b) (i) $10 = 2 \times 5$, $25 = 5 \times 5$,
 $35 = 5 \times 7$
 (ii) 350

16 25, 75

Praktis Sumatif

- 1 A 2 D 3 B 4 C 5 D
 6 (a) 1, 3, 11, 33 (b) 3, 11
 7 42, 84
 8 (a) 18 (b) 3 (c) 6 (d) 8
 9 1, 3
 10 4
 11 (a) I, II, IV (b) 13
 12 (a) 6, 12, 18, 24, 30
 (b) 30, 60, 90, 120, 150
 13 9
 14 180 saat/seconds

Praktis 3

Praktis Formatif

- 1 A
 2 (a) Bukan kuasa dua sempurna/Not a perfect square
 (b) Kuasa dua sempurna/A perfect square
 (c) Bukan kuasa dua sempurna/Not a perfect square
 (d) Kuasa dua sempurna/A perfect square
 3 A

- 4 (a) 2.6 (b) 0.038 (c) 11.9025 (d) 198.81
 5 (a) 43 681 (b) 66.5856 (c) 174.24 (d) $17\frac{13}{36}$
 6 (a) 2 (b) 0.6 (c) $\frac{5}{7}$ (d) $2\frac{2}{3}$
 7 (a) 4.123 (b) 0.097 (c) 0.828 (d) 2.708
 8 (a) 25 (b) 625 (c) 0.36 (d) 1 600
 9 (a) ✓ (b) ✗ (c) ✓ (d) ✗

10 (a) $48 \approx 49$ (b) $\frac{9.15}{\sqrt{9.15}} \approx \frac{9}{\sqrt{9}}$
 $\sqrt{48} \approx \sqrt{49}$ ≈ 7 ≈ 3
 (c) $\frac{143}{\sqrt{143}} \approx \frac{144}{\sqrt{144}}$ (d) $\frac{0.652}{\sqrt{0.652}} \approx \frac{0.64}{\sqrt{0.64}}$
 ≈ 12 ≈ 0.8

- 11 (a) $4 < 4.97 < 9$
 $2 < \sqrt{4.97} < 3$
 (b) $169 < 172 < 196$
 $13 < \sqrt{172} < 14$
 (c) $0.04 < 0.069 < 0.09$
 $0.2 < \sqrt{0.069} < 0.3$

- 12 (a) ✗ (b) ✓ (c) ✓

13 D

14 (a) (i)
$$\begin{array}{r} 2 \overline{) 50} \\ 5 \overline{) 25} \\ 5 \overline{) 5} \\ 1 \end{array}$$

 $50 = 2 \times 5 \times 5$
 (ii)
$$\begin{array}{r} 2 \overline{) 216} \\ 2 \overline{) 108} \\ 2 \overline{) 54} \\ 3 \overline{) 27} \\ 3 \overline{) 9} \\ 3 \overline{) 3} \\ 1 \end{array}$$

 $216 = 6 \times 6 \times 6$

- (b) (i) Tidak/No (ii) Ya/Yes
 15 (a) $\sqrt[3]{27} = 3$ (b) $1.3^3 = 2.197$
 (c) $\sqrt[3]{-1\frac{61}{64}} = -1\frac{1}{4}$
 16 (a) $2^3 = 8$ (b) $0.7^3 = 0.343$
 (c) $\left(-1\frac{1}{3}\right)^3 = -2\frac{10}{27}$
 17 (a) 125 (b) 0.512 (c) $-3\frac{3}{8}$
 18 (a) 35 937 (b) -314.432
 (c) $18\frac{26}{27}$ (d) $-42\frac{7}{8}$
 19 (a) 10 (b) -0.2
 20
$$\begin{aligned} \sqrt[3]{15\frac{5}{8}} &= \sqrt[3]{\frac{125}{8}} \\ &= \sqrt[3]{\left(\frac{5}{2}\right)^3} \\ &= \frac{5}{2} \\ &= 2\frac{1}{2} \end{aligned}$$

 21 (a) 2.884 (b) 3.484 (c) 2.480 (d) 3.055
 22 (a) 27 (b) -125 (c) 1 000

- 23 (a) ✗ (b) ✓ (c) ✓
 24 (a) $4 < 4.1 < 5$ (b) $-2 < -1.81 < -1$
 $64 < 4.1^3 < 125$ $-8 < (-1.81)^3 < -1$
 (c) $1 < 6 < 8$ (d) $-64 < -42.1 < -27$
 $1 < \sqrt[3]{6} < 2$ $-4 < \sqrt[3]{-42.1} < -3$

25 $15 \frac{5}{8} \text{ cm}^3$

- 26 (a) 57 (b) 50 (c) 8 (d) $\frac{2}{3}$

Praktis Sumatif

- 1 C 2 B 3 C 4 D 5 C
 6 (a) 145.6 (b) 10 000
 7 (a) 46.24
 (b) $6.8^3 + 3.2 \times 6.8^2 = 6.8^2 \times (6.8 + 3.2)$
 $= 46.24 \times 10$
 $= 462.4$
 8 8.805
 9 (a) 125, 216
 (b) (i) 5 (ii) -4
 10 (a) 1 600 (b) $19 \frac{3}{5}$
 11 (a) 21.16 (b) 10.6
 12 $\frac{4}{75}$
 13 92 cm^2

Praktis 4

Praktis Formatif

- 1 B
 2 (a) 1 : 3 : 10 (b) 5 : 2 : 3
 3 (a) 1 : 2, 4 : 8, 6 : 12 (b) 4 : 9, 12 : 27
 4 (a) 8 : 20 : 4 (b) 3 : 7 : 2
 (c) 10 : 8 : 3 (d) 16 : 2 : 9
 5 (a) 2 : 1 (b) 1 : 4
 6 5 : 6 : 11
 7 C
 8 (a) Nisbah/Ratio (b) Kadar/Rate
 9 (a) $\frac{90 \text{ km}}{1 \text{ j/h}} = \frac{90 \times 1\,000 \text{ m}}{1 \times 3\,600 \text{ s}}$
 $= \frac{25 \text{ m}}{1 \text{ s}}$
 $= 25 \text{ m/s}$
 (b) lebih rendah/lower
 10 1.5 Newton/cm²
 11 D
 12 (a) Harga bagi 25 liter petrol
 Price for 25 litres of petrol
 $= \text{RM}46$
 Harga bagi 1 liter petrol
 Price for 1 litre of petrol
 $= \frac{\text{RM}46}{25} = \text{RM}1.84$
 Harga bagi 60 liter petrol
 Price for 60 litres of petrol
 $= 60 \times 1.84$
 $x = 110.4$

(b) $25 : 60 = 46 : x$
 $\frac{25}{60} = \frac{46}{x}$
 $25x = 46 \times 60$
 $x = \frac{2\,760}{25}$
 $= 110.4$

- 13 (a) 21 (b) 30
 14 375 km
 15 C
 16 (a) 2 : 3 (b) 5 : 21
 (c) 4 : 5 (d) 13 : 33
 17 (a) 7 (b) 35
 18 USD2 800
 19 A
 20 5 600
 21 60, 96, 36
 22 B
 23

Nisbah Ratio	Peratusan Percentage	Pecahan Fraction	Perpuluhan Decimal
3 : 4	75%	$\frac{3}{4}$	0.75
2 : 5	40%	$\frac{2}{5}$	0.4
17 : 20	85%	$\frac{17}{20}$	0.85
9 : 25	36%	$\frac{9}{25}$	0.36

- 24 (a) 70% (b) 20% (c) 25% (d) 36%
 25 (a) ✓ (b) ✗ (c) ✓ (d) ✗
 26 (a) $x\%$ daripada/of 1 245 = 87.15

$$\frac{x}{100} \times 1\,245 = 87.15$$

$$x = 87.15 \times \frac{100}{1\,245}$$

$$= 7$$

(b) $\frac{15}{100} \times N = 27$

$$N = 27 \times \frac{100}{15}$$

$$= 180$$

- 27 50

Praktis Sumatif

- 1 D 2 B 3 D 4 C 5 D
 6 (a) (i) 15 : 8 : 10
 (ii) 15 : 8 : 10
 (b) Setara/Equivalent
 7 (a) (i) 5 : 12 (ii) 7 : 16
 (b) Bukan kadaran/Not a proportion
 8 (a) 51 (b) 1 050
 9 (a) 6 : 18 : 5 (b) 4 : 9 : 6
 10 $p = 45, q = 50, r = 70$
 11 650
 12 (a) 12 (b) 14 (c) 1 (d) $\frac{1}{3}$
 (e) 7.5 (f) 0.2

Praktis 5

Praktis Formatif

- 1 D 2 B
- 3 (a) Bilangan telur
Number of eggs
(b) Umur Mei Siew, Umur Fahna
Age of Mei Siew, Age of Fahna
(c) Bilangan soalan objektif
Number of objective questions
- 4 (a) $8 - x$ (b) $5t + 10$
(c) $2(h + k)$ (d) $\frac{1}{2}p - 4q$
- 5 RM($mx + ny$)
- 6 (a) $T = \frac{ak}{a - b}$ (b) $H = \frac{bk}{a - b}$
- 7 (a) 62 (b) 65 (c) -16 (d) -24
- 8 (a) 94 (b) 43
- 9 (a) $4x$ (b) $-7p$ (c) $\frac{3}{5}$ (d) $-\frac{9}{11}$
- 10 (a) $4k$ (b) -2 (c) $\frac{5}{6}p$ (d) $-\frac{3}{8}w$
- 11 (a) Sebutan serupa/*Like terms*
(b) Sebutan tak serupa/*Unlike terms*
(c) Sebutan tak serupa/*Unlike terms*
(d) Sebutan serupa/*Like terms*
- 12 Sebutan serupa/*Like terms*: $3a^2b^3, 2b^3a^2, -b^3a^2$
Sebutan tak serupa/*Unlike terms*: $10a^2b^4, 7a^3b^2, 4b^3a^3$
- 13 C
- 14 D
- 15 (a) $5a - 8$ (b) $-h - 10p$
(c) $5 + 3mn$ (d) $22n^2 - 12m^2n$
- 16 (a) $2k + 5h + 4$ (b) $-m + 9n - 6$
(c) $12p^2 + 7rs - 6$ (d) $4uv + 9w - 11$
- 17 (a) $a \times a$ (b) $a \times a \times a$
(c) $a \times a \times a \times a$ (d) $a \times a \times a \times a \times a$
- 18 (a) $(3k + 5) \times (3k + 5)$
(b) $(x + y - z) \times (x + y - z)$
(c) $(a - 2b) \times (a - 2b) \times (a - 2b)$
- 19 (a) $(uv^2w)^3$ (b) $(uv^2w)^4$
- 20 (a) $5cy \times 2c^2y$
 $= 5 \times c \times y \times 2 \times c \times c \times y$
 $= 5 \times 2 \times c \times c \times c \times y \times y$
 $= 10c^3y^2$
(b) $\frac{12a^2b^4}{4ab^2} = \frac{12 \times a \times a \times b \times b \times b \times b}{4 \times a \times b \times b}$
 $= 3ab^2$
- 21 (a) $12r^2st^2$ (b) $18m^3ny$
(c) $-10a^3b^2c^4$ (d) $4p^3x^2y^4$
- 22 (a) ✓ (b) ✓ (c) ✓ (d) ✗
- 23 (a) $2n$ (b) $\frac{4m^2}{n}$ (c) $2n$ (d) $\frac{mn}{2}$

Praktis Sumatif

- 1 B 2 C 3 A 4 A 5 A
- 6 (a) Markah ujian Matematik, nilai yang berubah
Marks scored in Mathematics test, variable value

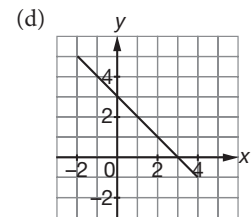
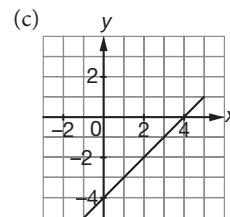
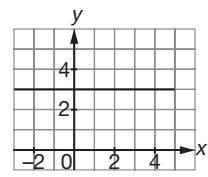
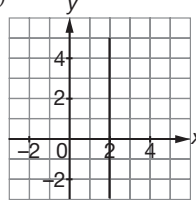
- (b) Tambang kereta api elektrik bagi seorang penumpang dewasa, nilai yang tetap
The electric train fare of an adult passenger, constant value

- 7 10
- 8 (a) $20x + 50y$ (b) RM3 200
- 9 $5cde, -12dec$
- 10 (a) $13ab - 6cd - 13a^2$ (b) $3kpq - 17hy$
- 11 (a) $49m^2n^2$ (b) $\frac{2}{3}r$
(c) $-4xy^2z$

Praktis 6

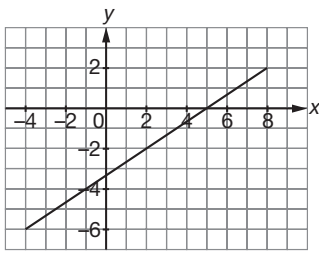
Praktis Formatif

- 1 C
- 2 (a) Tidak/*No* (b) Ya/*Yes*
(c) Ya/*Yes* (d) Tidak/*No*
- 3 (a) $a + 3 = 10$ (b) $3a = 10$
(c) $a - 10 = 3$ (d) $3 = a + 10$
- 4 (a) $5x = 12$ (b) $m + 70 = 150$
- 5 $2x + 3 = 23$
- 6 (a) -5 (b) 4 (c) -2 (d) -8
- 7 C
- 8 $9 - 2 = k + \frac{2k}{5}$
 $7 = \frac{7k}{5}$
 $k = 5$
- 9 (a) ✓ (d) ✓
- 10 $m = -\frac{5}{13}$
- 11 (a) $5 - x = 3\frac{1}{2}$ (b) $x = 1\frac{1}{2}$
- 12 (a) $900 = 4x$ (b) $x = 225$
- 13 B
- 14 (a) $6x + 4y = 35$ (b) $x = 43 - y$
- 15 (a) $x = y + 16$ (b) $3x = 5y$
- 16 (a) 6; (2, 6) (b) 0; (0, -4)
(c) -1; (-3, -1) (d) -8; (-8, -3)
- 17 (a) $x = 2, y = -1$ (b) $x = 3, y = 5$
(c) $x = 5, y = 1$ (d) $x = -1, y = -2$
- 18 (a)



19 (a) $-6, -2, 2$

(b)



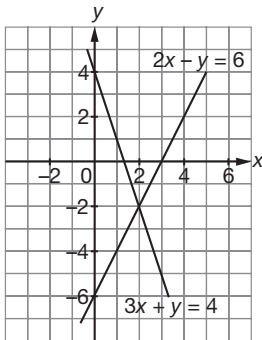
20 A

21 (a) II, Penyelesaian unik/*Unique solution*

(b) III, Tiada penyelesaian/*No solution*

(c) I, Penyelesaian tak terhingga/*Infinite solutions*

22 (a)

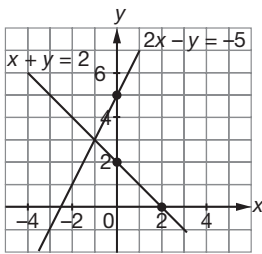


(b) (i) bersilang/*intersect*

(ii) penyelesaian unik/*unique solution*

(c) $x = 2, y = -2$

23 (a)



$x = -1, y = 3$

(b) (i) $x + y = 2$ ——— ①

$2x - y = -5$ ——— ②

Daripada/From ①,

$y = 2 - x$ ——— ③

Gantikan/Substitute ③ ke dalam/into ②,

$$2x - (2 - x) = -5$$

$$2x - 2 + x = -5$$

$$2x + x = -5 + 2$$

$$3x = -3$$

$$x = -1$$

Gantikan/Substitute $x = -1$ ke dalam/into ①,

$$-1 + y = 2$$

$$y = 3$$

(ii) ① + ②,

$$x + 2x = 2 + (-5)$$

$$3x = -3$$

$$x = -1$$

Gantikan/Substitute $x = -1$ ke dalam/into ①,

$$-1 + y = 2$$

$$y = 3$$

24 (a) $x = 1, y = 4$

(b) $x = 5, y = 3$

(c) $x = -2, y = 6$

(d) $x = -3, y = -2$

25 (a) $x = 14 + y$

(b) $x = 84$

$$x + y = 154$$

$$y = 70$$

26 (a) $a + b = 72; a = 2b$

(b) $a = 48, b = 24$

27 (a) $3x + 7y = 26$

(b) $x = 4, y = 2$

$$x + 4y = 12$$

Praktis Sumatif

1 A 2 A 3 D 4 B 5 B

6 (a) $x + (x + 2) = 64$

(b) Beza antara y dengan 8 ialah 15

The difference between y and 8 is 15

7 (a) $k = 3$

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

8 80, 160, 240

9 (a) $2 + 0.5(t - 1) = 9$

(b) 15

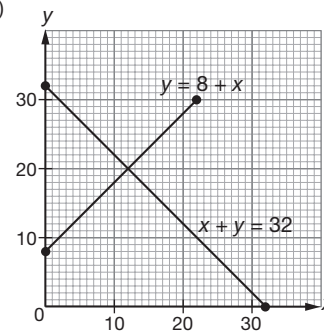
10 (a) $m + 4n = 165$

(b) $m = 33, n = 33$ atau/or $m = 37, n = 32$

11 (a) $x + y = 32$

$$y = 8 + x$$

(b)



(c) $x = 12, y = 20$

12 $k = 2, m = -2$

13 $x = 4, y = 1$

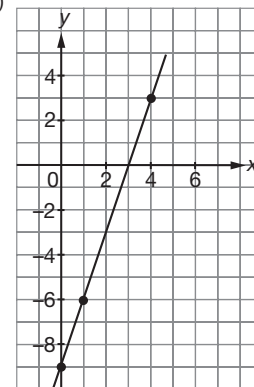
14 (a) $x - y = 30; x - 3y = 14$

(b) Rahman: 38 tahun/*years old*;

Zainal: 8 tahun/*years old*

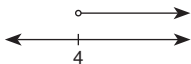

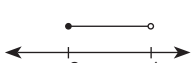
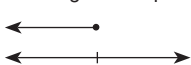
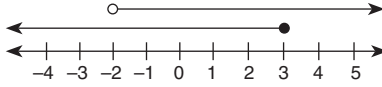
15 (a) $(0, -9), (1, -6), (4, 3)$

(b)



Praktis 7

Praktis Formatif

- 1 C
- 2 (a) $4 < 6$ atau/or $6 > 4$
 (b) $-2 < 1$ atau/or $1 > -2$
 (c) $-8 < -5$ atau/or $-5 > -8$
 (d) $-4 < 0$ atau/or $0 > -4$
- 3 (a) $-5 < 3$ (b) $-2 > -8$
- 4 (a) Palsu/False (b) Benar/True
 (c) Benar/True (d) Palsu/False
- 5 (a) ✓ (b) ✗ (c) ✓ (d) ✗
- 6 (a) Sifat transitif
Transitive property
 (b) Sifat akas
Converse property
 (c) Songsangan terhadap pendaraban
Multiplicative inverse
 (d) Songsangan terhadap penambahan
Additive inverse
- 7 (a) $>$ (b) $<$ (c) $>$ (d) $<$
- 8 (a) ✗ (b) ✓ (c) ✓ (d) ✗
- 9 (a) $5 < 10$ (b) $-3 > -9$
 (c) $5 > 3$ (d) $2 > 1$
- 10 (a) $>$ (b) $<$ (c) \geq (d) \leq
- 11 D
- 12 $y > 150$
- 13 (a) Kadar dividen yang dibayar syarikat OWC setiap tahun adalah kurang daripada 8%.
The rate of dividend paid by Company OWC each year is less than 8%.
 (b) Poligon mempunyai sekurang-kurangnya 3 sisi.
A polygon has at least 3 sides.
- 14 (a) Tidak/No (b) Ya/Yes
 (c) Ya/Yes (d) Tidak/No
- 15 (a) $m < -3$ (b) $k \leq 8$
 (c) $r \leq -8$ (d) $x > -1$
- 16 A
- 17 15
- 18 (a) ✗ (b) ✗ (c) ✓ (d) ✓
- 19 (a) 
 (b) 
 (c) 
 (d) 
- 20 (a) (i) $a > -2$ (ii) $a \leq 3$
 (b) 
 (c) $-2 < a \leq 3$

- 21 A
- 22 (a) $-2 < k \leq 4$
 (b) $-1, 0, 1, 2, 3, 4$

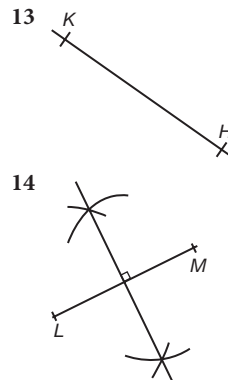
Praktis Sumatif

- 1 D 2 B 3 B 4 A 5 C
- 6 (a) (i) $<$ (ii) $>$
 (b) (i) $-11 < -1$ (ii) $m > 3$
- 7 (a) $m \leq 8$ (b) $r > 10$
 (c) $v < 2$ (d) $a \geq -4$
- 8 (a) $m > -\frac{3}{10}$ (b) $a \geq \frac{15}{7}$
- 9 $-\frac{1}{2}x \geq -1; \frac{1}{3} \geq \frac{1}{6}x$
 $x \geq 2x - 2; 2 \geq \frac{x+4}{3}$
- 10 (a) $2(x+17) \leq 52 - x$ (b) 6
- 11 $-\frac{5}{2} \leq r < 10$
- 12 (a) $2x + 5 < x + 9$ (b) $-1, 0, 1, 2, 3$

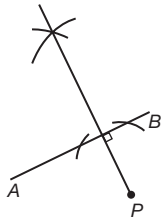
Praktis 8

Praktis Formatif

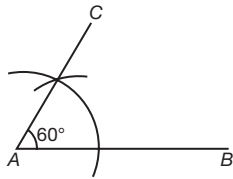
- 1 C 2 D
- 3 (a) Ya/Yes (b) Tidak/No
- 4 (a) Sudut yang tidak kongruen/*Non-congruent angles*
 (b) Sudut yang kongruen/*Congruent angles*
- 5 (a) 3 cm (b) 160°
- 6 (a) 12 (b) 250
- 7 (a) 72° (b) 145° (c) 90° (d) 206°
- 8 (a) Sudut refleks/*Reflex angle*
 (b) Sudut pada garis lurus/*Angle on straight line*
 (c) Sudut putaran lengkap/*Whole turn angle*
- 9 (a) $110^\circ, 250^\circ$ (b) $60^\circ, 30^\circ$
 (c) $80^\circ, 100^\circ$
- 10 (a) 20 (b) 130 (c) 260
- 11 $x + 65^\circ = 90^\circ$
 $x = 90^\circ - 65^\circ$
 $= 25^\circ$
 $x + y = 180^\circ$
 $25^\circ + y = 180$
 $y = 155^\circ$
- 12 (a) 200° (b) 160°



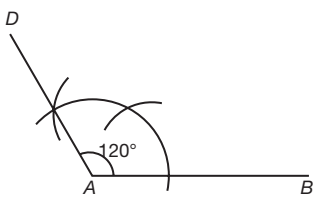
15



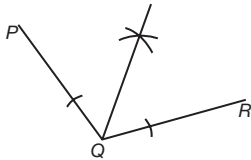
16 (a)



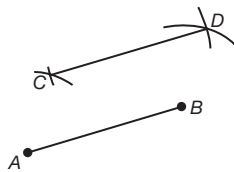
(b)



17



18



19 B

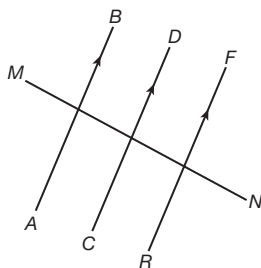
- 20 (a) Sudut bersebelahan pada garis
Adjacent angles on line
(b) Sudut bertentangan bucu
Vertically opposite angles
(c) Sudut bersebelahan pada garis
Adjacent angles on line
(d) Sudut bersebelahan pada garis
Adjacent angles on line
(e) Sudut bertentangan bucu
Vertically opposite angles

21 (a) 66° (b) 31°

22 $x = 20, y = 60$

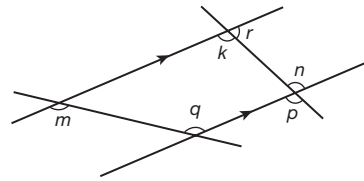
23 C

24



- 25 (a) Sudut-sudut pedalaman/*Interior angles*
(b) Sudut-sudut berselang-seli/*Alternating angles*
(c) Sudut-sudut sepadan/*Corresponding angles*

26



27 (a) ✓ (b) ✗ (c) ✓ (d) ✗

28 (a) Tidak selari/*Not parallel*

(b) Selari/*Parallel*

(c) Selari/*Parallel*

29 (a) 36° (b) 32° (c) 39°

30 (a) DCB (b) ABC

Praktis Sumatif

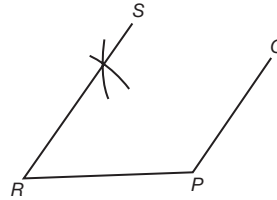
1 A 2 C 3 B 4 C 5 D

6 (a) 6 cm (b) 140°

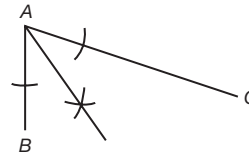
7 (a) 140° (b) 70° (c) m°

8 $a = 40^\circ, b = 120^\circ, c = 60^\circ$

9



10



11 $x = 40, y = 10$

12 (a) Selari/*Parallel*, $\angle LHN = \angle HNM$

(b) $x = 52^\circ$

13 (a) $x = 54, y = 60$ (b) 36°

(c) 30°

Praktis 9

Praktis Formatif

1 C

2 (a) Benar/*True* (b) Palsu/*False*

(c) Palsu/*False*

3 (a) 5 (b) 5

(c) 5 (d) Pentagon

4 D

5 (a) Segi tiga tak sama kaki/*Non-isosceles triangle*

(b) Segi tiga sama kaki/*Isosceles triangle*

(c) Segi tiga sama sisi/*Equilateral triangle*

6 (a) Segi tiga sama sisi/*Equilateral triangle*

(b) Segi tiga sama kaki/*Isosceles triangle*

(c) Segi tiga bersudut tegak/*Right-angled triangle*

- 7 (a) Segi tiga sama kaki/*Isosceles triangle*
 (b) Segi tiga bersudut tegak/*Right-angled triangle*
 (c) Segi tiga sama sisi/*Equilateral triangle*
- 8 (a) ✓ (b) ✗ (c) ✓ (d) ✓
- 9 (a) 60 (b) 76
- 10 (a) $x = 47^\circ + 34^\circ = 81^\circ$
 (b) $x + 21^\circ = 132^\circ$
 $x = 110^\circ$
- 11 $x = 60^\circ, y = 71^\circ$
- 12 $x = 137^\circ, y = 26^\circ$
- 13 A
- 14 (a) Betul/*Correct* (b) Betul/*Correct*
 (c) Salah/*Wrong* (d) Betul/*Correct*
- 15 (a) ✗ (b) ✓ (c) ✗ (d) ✓
- 16 $3x + 130 + x + 70 = 360$
 $4x = 160$
 $x = 40$
- 17 $x = 70$
- 18 $x = 48, y = 132$
- 19 $x = 138^\circ, y = 36^\circ$
- 20 $x = 44, y = 78$

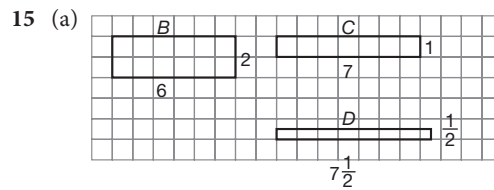
Praktis Sumatif

- 1 B 2 C 3 A 4 A 5 C
- 6 (a) Heksagon/*Hexagon*
 (b) (i) 1 (ii) 9
- 7 $x = 10^\circ$
- 8 $x = 20$
- 9 $x = 74, y = 46$
- 10 $x = 67, y = 30$

Praktis 10

Praktis Formatif

- 1 A
- 2 (a) 22 cm (b) 28 cm (c) 24 cm
- 3 51 cm 4 8 cm
- 5 56 cm 6 44 cm
- 7 3 8 B
- 9 24 unit²
- 10 (a) 15 cm² (b) 32 cm²
 (c) 40 cm² (d) 45 cm²
- 11 (a) Luas trapezium ABCD
Area of trapezium ABCD
 $= \frac{1}{2} \times (48 + 32) \times 25$
 $= 1\,000 \text{ cm}^2$
 (b) Luas segi empat selari DEFG
Area of parallelogram DEFG
 $= 16 \times 15$
 $= 240 \text{ cm}^2$
 (c) Luas rantau berlengkung
Area of the shaded region
 $= 1\,000 - 240$
 $= 760 \text{ cm}^2$
- 12 206 cm²
- 13 C
- 14 (a) P, Q, R (b) bertambah/*increases*



(b)

Segi empat tepat <i>Rectangle</i>	Panjang <i>Length</i> (unit)	Lebar <i>Width</i> (unit)	Perimeter (unit)	Luas <i>Area</i> (unit ²)
A	5	3	16	15
B	6	2	16	12
C	7	1	16	7
D	$7\frac{1}{2}$	$\frac{1}{2}$	16	$3\frac{3}{4}$

(c) bertambah/*increases*

- 16 (a) 38 cm (b) 78 cm²
- 17 180 cm²

Praktis Sumatif

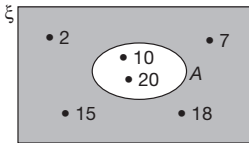
- 1 B 2 A 3 B 4 B 5 C
- 6 47 m
- 7 300 cm²
- 8 $PR = 60 \text{ m}$

Praktis 11

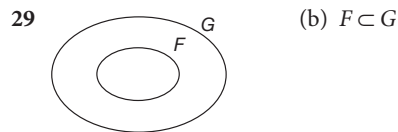
Praktis Formatif

- 1 B
- 2 (a) Nasi/*Rice*, Biskut/*Biscuits*, Kek limau/*Lime cake*, Roti/*Bread*
 (b) Jus oren/*Orange juice*, Kopi/*Coffee*, Susu/*Milk*, Air tebu/*Sugar cane*
- 3 (a) {2, 4, 6, 8, 10, 12, 14}
 (b) $\{x : x < 15, x \text{ ialah integer positif genap}\}$
 $\{x : x < 15, x \text{ is a positive even integer}\}$
 (c) Set integer positif genap yang kurang daripada 15
Set of even integers less than 15
- 4 (a) Set huruf-huruf dalam ungkapan RUKUN NEGARA.
A set of letters in the expression RUKUN NEGARA
 (b) {A, E, G, K, N, R, U}
 (c) $\{x : x \text{ ialah huruf dalam ungkapan RUKUN NEGARA}\}$
 $\{x : x \text{ is a letter in the expression RUKUN NEGARA}\}$
- 5 (a) Salah/*Wrong* (b) Betul/*Correct*
 (c) Salah/*Wrong*
- 6 (a) ✓ (b) ✗ (c) ✗ (d) ✓
- 7 (a) \in (b) \notin (c) \notin (d) \in
- 8 (a) 7 (b) 0 (c) 10 (d) 9
- 9 (a) {6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21}
 (b) 16
- 10 11

- 11 (a) $\{(1, 9), (2, 8), (3, 7), (4, 6), (5, 5), (6, 4), (7, 3), (8, 2), (9, 1)\}$
 (b) 9
- 12 (a) $\{0, 1, 3, 2\}$ (b) $\{4, 2, 1\}$
 (c) $\{3, 2, 5\}$ (d) $\{3, 7, 2\}$
- 13 (a) = (b) \neq
- 14 (a) (i) $\{2, 3, 5, 7\}$
 (ii) $\{1, 3, 5, 7, 9\}$
 (b) Tidak/No
- 15 B
- 16 (a) $\{x : x \text{ ialah nombor nisbah}\}$
 $\{x : x \text{ is a rational number}\}$
 (b) $\{\text{Huruf dalam perkataan HARMONI}\}$
 $\{\text{Letters in the word HARMONI}\}$
 (c) $\{3, 5, 7, 9, 11, 13\}$
 (d) $\{i, n, d, a, h\}$
- 17 (a) S
 (b) (i) 4, 5, 7, 8 (ii) 4, 6, 8
 (iii) 5, 6, 7, 8, 9
- 18 (a) $A = \{F, O, R, M, U, L, A\}$
 (b) (i) $\{F, O, R\}$
 (ii) $\{M, U, L, A\}$
 (iii) $\{F, O, M\}$
 (iv) $\{F, R, M, U, L\}$
- 19 (a) $A' = \{9, 10, 12, 13, 14, 16, 18, 19\}$
 (b) $B' = \{9, 11, 13, 15, 17, 19\}$
- 20 (a), (b)

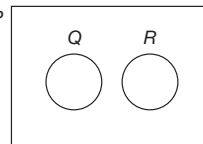


- 21 (a) (b)
- 22 (a) (b) (i) $\{1, 3, 4, 6, 7, 8, 9, 11, 13\}$
 (ii) $\{1, 7, 9, 11, 13\}$
- 23 (a) \subset (b) \subset (c) $\not\subset$ (d) \subset
- 24 $\{e, u\}, \{i\}, \emptyset, \{e, i, o, u\}$
- 25 $\{H\}, \{O\}, \{T\}, \{H, O\}, \{H, T\}, \{O, T\}, \{H, O, T\}, \{\}$
- 26 (a) 16
 (b) (i) $\{6, 1\}, \{6, 3\}, \{6, 8\}, \{1, 3\}, \{1, 8\}, \{3, 8\}$
 (ii) $\{6, 1, 3\}, \{6, 1, 8\}, \{6, 3, 8\}, \{1, 3, 8\}$
- 27 (a) (b)
- 28 (a) \times (b) \times (c) \checkmark (d) \checkmark



Praktis Sumatif

- 1 D 2 D 3 D 4 C 5 C
- 6 (a) Set kuasa dua sempurna kurang daripada 37.
A set of perfect squares less than 37.
 (b) $\{1, 4, 9, 16, 25, 36\}$
 (c) $\{x : x < 37, x \text{ ialah kuasa dua sempurna}\}$
 $\{x : x < 37, x \text{ is a perfect square}\}$
- 7 (a) Salah/Wrong (b) Betul/Correct
 (c) Betul/Correct (d) Salah/Wrong
- 8 (a) $\{17, 26, 35, 44, 53, 62\}$
 (b) 6
- 9 (a) \subset (b) $\not\subset$
- 10 (a) $\{b, c, e, f, g, h, i, j\}$ (b) $\{a, c, d, e, g, h, j\}$
- 11 (a) (i) Q (atau/or) R (ii) Q
 (b) P



- 12 (a) $3 \in A$ (b) $\{2\} \subset A$
 (c) $n(A) = 3$ (d) $A' = \{1\}$

Praktis 12

Praktis Formatif

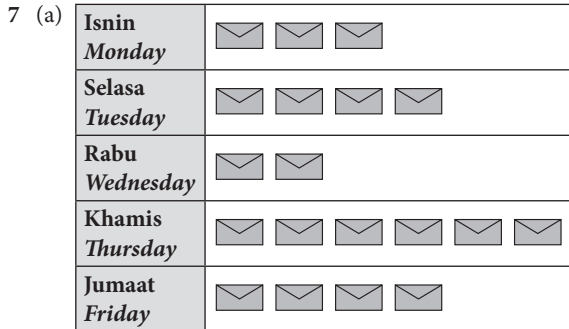
- 1 A
 2 D
 3 (a) Data kategori/Categorical data
 (b) Data numerik/Numerical data
 4 (a) Data kategori/Categorical data
 (b)

Negeri/State	Kekerapan/Frequency
Selangor	74
Pulau Pinang	60
Perak	48
Kelantan	43
Johor	35

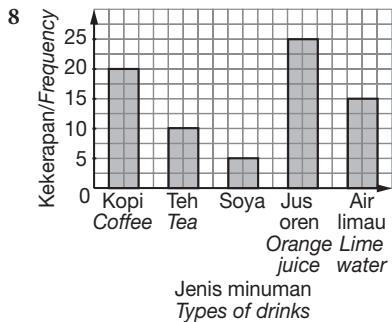
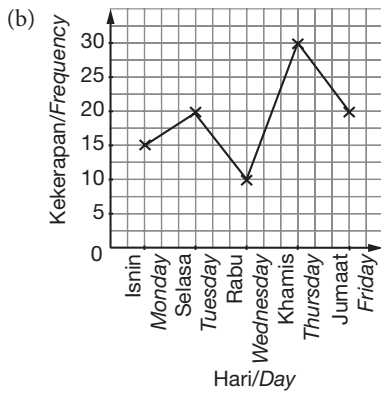
- 5 (a) Data numerik/Numerical data

Bilangan item Number of items	Tanda gundal Tally mark	Kekerapan Frequency
1		3
2		5
3		3
4		6
5		3

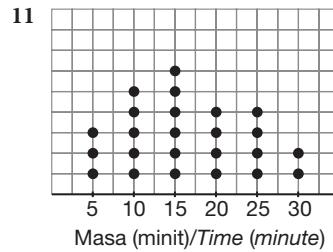
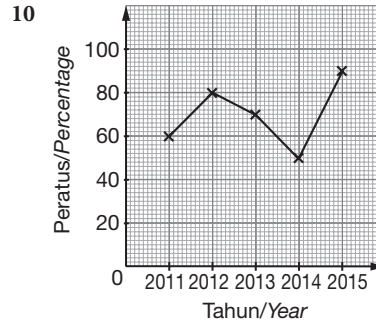
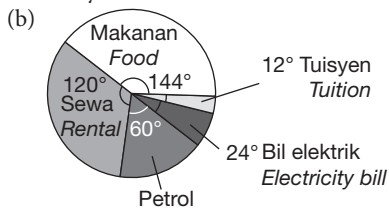
Wang (RM) Money (RM)	Kekerapan Frequency
1	6
5	2
8	5
10	8
15	4



mewakili 5 pucuk surat
represents 5 letters



- 9 (a) Sewa/Rental 120° , Petrol 60° ,
Bil elektrik/Electricity bill 24° ,
Tuisyen/Tuition 12°



12

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

5|6 bererti 56 markah
5|6 means 56 marks

13 (a)

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

2|5 bererti 25 minit
2|5 means 25 minutes

(b)

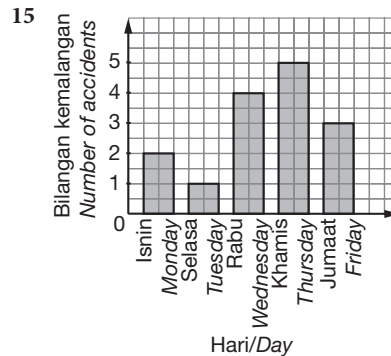
Batang/Stem	Daun/Leaf
12	40 80
17	30 50 80
20	10 20 50
25	00 40 40 80

20|20 bererti RM20.20
20|20 means RM20.20

14 (a) ✓

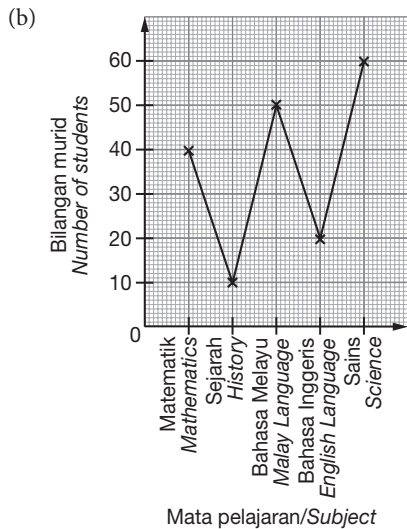
(b) ✓

(c) ✓



16 (a)

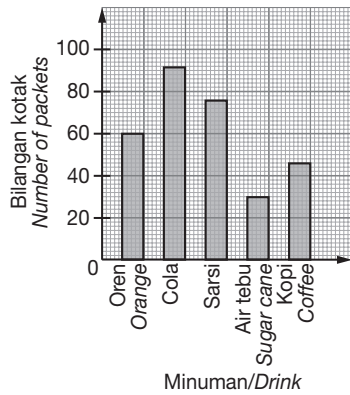
Mata pelajaran Subject	Bilangan murid Number of students
Matematik Mathematics	$\frac{80^\circ}{360^\circ} \times 180 = 40$
Sejarah History	$\frac{20^\circ}{360^\circ} \times 180 = 10$
Bahasa Melayu Malay Language	$\frac{100^\circ}{360^\circ} \times 180 = 50$
Bahasa Inggeris English Language	$\frac{40^\circ}{360^\circ} \times 180 = 20$
Sains Science	$\frac{120^\circ}{360^\circ} \times 180 = 60$



- 17 (a) X (b) ✓ (c) X (d) ✓
 18 (a) Salah/Wrong (b) Betul/Correct
 (c) Betul/Correct (d) Salah/Wrong
 19 (a) RM16.00 (b) RM22.50 (c) RM10.50
 20 RM50 ribu/thousand
 21 (a) 120° (b) 48
 22 (a) 40 (b) 70 (c) 20%
 23 (a) 40 (b) 4 : 1

Praktis Sumatif

- 1 C 2 C 3 D 4 B 5 C
 6



7 (a)

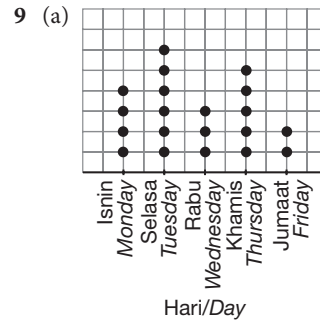
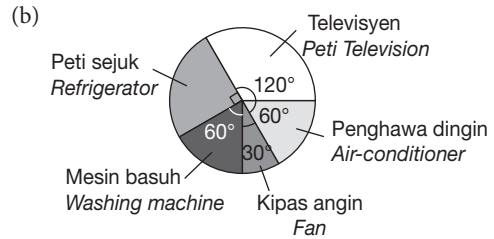
Batang/Stem	Daun/Leaf
3	20 75 90
4	00 40 80 80 85
5	10 25 30 50 50 60 70
6	30 30 40 50 80

4|40 bererti/means RM4.40

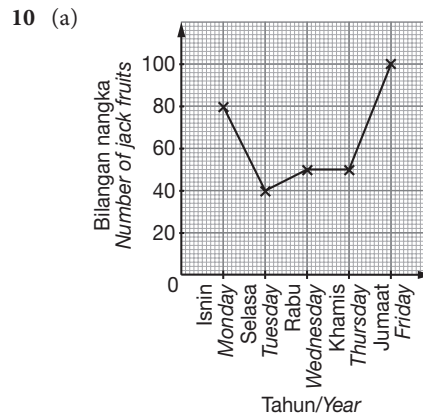
- (b) (i) 2 (ii) 60%

8 (a)

Alat elektrik Electrical item	Sudut sektor Angle of sector
Televisyen Television	120°
Peti sejuk Refrigerator	90°
Mesin basuh Washing machine	60°
Kipas angin Fan	30°
Penghawa dingin Air-conditioner	60°



- (b) 30%



- (b) Rabu/Wednesday, Khamis/Thursday

Praktis 13

Praktis Formatif

- 1 (a) AC (b) ST
 2 (a) $a^2 = b^2 + c^2$ (b) $c^2 = a^2 + b^2$
 (c) $b^2 = a^2 + c^2$
 3 D
 4 $x^2 = 3^2 + 10^2$
 $= 109$
 $x = \sqrt{109}$
 $= 10.44$
 5 25.8 cm
 6 $16^2 = x^2 + 13^2$
 $256 = x^2 + 169$
 $x^2 = 87$
 $x = \sqrt{87}$
 $= 9.33$
 7 18.3 8 C
 9 76.22 km 10 D
 11 (a) $AC^2 = 81$
 $AB^2 + BC^2 = 6^2 + 7^2$
 $= 85$
 $AC^2 \neq AB^2 + BC^2$
 ABC bukan sebuah segi tiga bersudut tegak.
 ABC is not a right-angled triangle.
 (b) $LN^2 = 625$
 $LM^2 + MN^2 = 15^2 + 20^2$
 $= 625$
 $LN^2 = LM^2 + MN^2$
 LMN ialah sebuah segi tiga bersudut tegak.
 LMN is a right-angled triangle.
 12 (a) ✓ (b) ✗
 13 (a) $QR^2 \neq PQ^2 + PR^2$
 (b) Panjang tali yang perlu dipotong/Length of rope
 that needs to be cut = 0.2 m

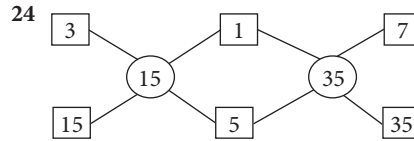
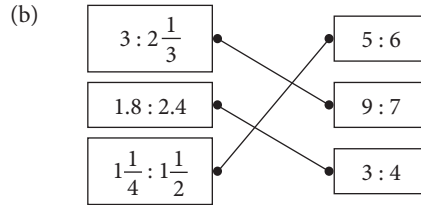
Praktis Sumatif

- 1 A 2 C 3 A 4 B 5 C
 6 8.31 cm
 7 (a) (i) 20 cm (ii) 13 cm
 (b) Tidak/No, $CD^2 \neq CE^2 + DE^2$

Pentaksiran Sumatif

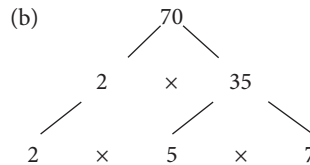
- 1 B 2 B 3 C 4 D 5 A
 6 A 7 B 8 A 9 C 10 B
 11 C 12 D 13 D 14 C 15 A
 16 C 17 B 18 B 19 C 20 B
 21 (a) $\sqrt{30}$
 (b) $2.708 \times 60 + 40 \times 2.708$
 $= 2.708 \times (60 + 40)$
 $= 2.708 \times 100$
 $= 270.8$
 22 $p = 3\frac{1}{4}$, $q = 3.7$
 $r = 4.2$, $s = 4\frac{4}{5}$

- 23 (a) 216



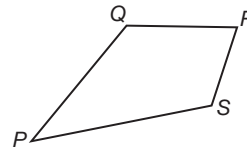
FSTB/HCF : 5

- 25 (a) $4 = 2 \times 2$
 $9 = 3 \times 3$
 $12 = 2 \times 2 \times 3$
 (b) 36 (c) $x = 3$
 26 (a) 2 020 m
 (b) 23, 29, 31, 37
 (Mana-mana tiga/Any three)
 (c) 14.12
 27 (a) $x = 3$ (b) 30 cm
 (c) (i) 32
 (ii) $B' = \{2, 3, 4, 6, 7, 8, 9, 10\}$
 28 (a) (i) 19.02 (ii) 19.0



Faktor-faktor perdana bagi/Prime factors of 70:

- 2, 5, 7
 (c) $(4a + 14)$ cm
 29 (a) $x = 6, y = -2$
 (b) (i)



- (ii) 39°
 (c) (i) 42 km (ii) 6
 30 (a) $x = 27, y = 76$
 (b) (i) Tidak/No, $12^2 + 20^2 \neq 24^2$
 (ii) Ya/Yes, $12^2 + 16^2 = 20^2$
 (c) $x = 65, y = 105$
 31 (a) $-3 < x < 2$ (b) $h = 12$

