Jawapan

Praktis 1

Praktis Formatif

1 D

2

Bentuk indeks *Index form*	Asas *Base*	Indeks *Index*
2^3	2	3
3^5	3	5
1.2^3	1.2	3
$(-7)^2$	-7	2

3 (a) 5^7
   (b) 10^4
   (c) $(-1.3)^6$

4 (a) 2^3
   (b) 3^4
   (c) 7^2
   (d) 6^3

5 (a)
$$7 \,|\, \underline{343}$$
$$7 \,|\, \underline{49}$$
$$7 \,|\, \underline{7}$$
   (b) 343
$$= 7 \times 7 \times 7$$
$$= 7^3$$

6 (a) ✓   (b) ✗   (c) ✗   (d) ✓

7 D

8 (a) $(2 \times 2 \times 2) \times (2 \times 2) = 2^5$
   (b) 2^5
   (c) $+$

9 (a) (i) $(3 \times 3) \times (3 \times 3 \times 3 \times 3 \times 3)$
$$= 3^7$$
     (ii) $3^{2+5} = 3^7$
   (b) $3^2 \times 3^5 = 3^{2+5}$

10 (a) ✗   (b) ✗   (c) ✓   (d) ✗

11 (a) 4   (b) 2   (c) 0   (d) 2

12 (a) $\dfrac{3 \times 3 \times 3 \times 3 \times 3}{3 \times 3} = 3^3$
   (b) 3^3
   (c) 3^{5-2}

13 (a) (i) $\dfrac{2 \times 2 \times 2 \times 2 \times 2 \times 2}{2 \times 2 \times 2 \times 2}$
$$= 2^2$$
     (ii) $2^{6-4} = 2^2$

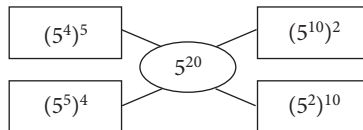
   (b) $\dfrac{2^6}{2^4} = 2^{6-4}$

14 (a) 5   (b) 4   (c) 9   (d) 6

15

m	5	8	10	6
n	2	5	7	3

16 (a) (i) $(3^4)^3 = 3^4 \times 3^4 \times 3^4$
$$= 3^{4+4+4}$$
$$= 3^{12}$$
     (ii) $(3^4)^3 = 3^{4 \times 3} = 3^{12}$
   (b) $(3^4)^3 = 3^{4 \times 3}$

17

$(5^4)^5$		$(5^{10})^2$
	5^{20}	
$(5^5)^4$		$(5^2)^{10}$

18 (a) (i) $a^3 \div a^3 = \dfrac{a^3}{a^3}$
$$= \dfrac{a \times a \times a}{a \times a \times a}$$
$$= 1$$
     (ii) $a^3 \div a^3 = a^{3-3} = a^0$
   (b) $a^0 = 1, a \neq 0$

19 (a) (i) $\dfrac{a \times a}{a \times a \times a}$
$$= \dfrac{1}{a}$$
     (ii) $a^{2-3} = a^{-1}$
   (b) $a^{-1} = \dfrac{1}{a}$

20 (a) ✓   (b) ✗
   (c) ✓   (d) ✓

21 (a) $\dfrac{1}{2^{13}}$ (b) $\dfrac{1}{5^4}$
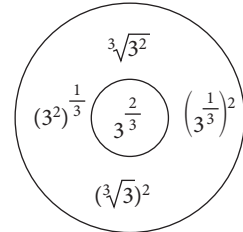   (c) 12^6 (d) $\left(\dfrac{2}{3}\right)^2$

22

Nombor *Number*	$\dfrac{1}{3}$	$\dfrac{1}{14^2}$	$\dfrac{1}{10^5}$	$\left(\dfrac{4}{7}\right)^8$
Bentuk *Form* a^{-n}	3^{-1}	14^{-2}	10^{-5}	$\left(\dfrac{7}{4}\right)^{-8}$

as   as   as

---

23 (a) $(2^3)^{\frac{1}{4}}$ (b) $\sqrt[5]{10^2}$
   (c) $\sqrt[3]{6^2}$ (d) $(\sqrt[7]{3})^4$

24

25 (a) $x = 5, y = 4$
   (b) $x = 7, y = 3$

26 (a) 2^6 (b) 2^5
   (c) 2^{10} (d) 2^7

27 (a) ✓   (b) ✗
   (c) ✗   (d) ✓

28 (a) $\dfrac{1}{4} \times \dfrac{1}{3} = \dfrac{1}{12}$
   (b) $\dfrac{1}{7} \div \dfrac{1}{6} = \dfrac{1}{7} \times 6$
$$= \dfrac{6}{7}$$

29 (a) 144   (b) 25
   (c) 1   (d) $\dfrac{7}{18}$

30 B

31 16

32 $\dfrac{1}{25}$

Praktis Sumatif

1 C   **2** D   **3** A   **4** A   **5** C

6 (a) $5\dfrac{1}{16}$
   (b) 74.088

7 $m = 2, n = 3; m = 4, n = 1;$
   $m = 3, n = 2$

8 (a) $x - 4 = y$
   (b) $x = 7$

9 $k = 12, m = 9, n = 10$

10 (a) $p = 3, q = 16$
   (b) $a^4 = \dfrac{1}{36}$

11 (a) 19 683

(b) $\dfrac{1}{729}$

12 $\dfrac{1}{49}$

13 $\dfrac{3}{8}$

14 $\dfrac{3}{4}$

15 (a) 3^{4p-1}

(b) 3^{17x-21}

Praktis 2

Praktis Formatif

1 A

2 (a) 5   (b) 3

(c) 5   (d) 4

3 (a) 0.04, 90, 3, 20 000

(b) 5.0, 0.032, 0.000063, 88

(c) 1.02, 43.9, 0.00701, 0.230

4 (a) 300

(b) 300

(c) 303

5 (a) ✓   (b) ✓

(c) ✗   (d) ✗

6 (a)

6	6.15
(b) 300	251
(c) 0.8	0.820
(d) 0.004	0.00420

7 D

8 (a) 8×10^2

(b) 6.3×10^{-3}

(c) 1.724×10^3

(d) 5.91×10^{-6}

9 (a) 2.6×10^3

(b) 1.548×10^{-4}

(c) 3.2×10^5

(d) 4.5×10^{-7}

10

12 ∧ 400 000 ∧ 0.9 ∧ 0.00064
    as   as   as

1.2×10^1 4×10^5 9×10^{-1} 6.4×10^{-4}

11 (a) 1.4×10^4

(b) 7×10^5

(c) 4.30×10^{-2}

(d) 2.9×10^{-6}

12 (a) $584 + 6\,103 = 6\,687$
$$= 6.687 \times 10^3$$

(b) $0.46 - 0.0007$
$$= 0.4593$$
$$= 4.593 \times 10^{-1}$$

(c) $320 \times 80 = 25\,600$
$$= 2.56 \times 10^4$$

(d) $0.12 \div 2\,400 = 0.00005$
$$= 5 \times 10^{-5}$$

13 (a) ✓   (b) ✗   (c) ✓   (d) ✓

14 (a) $3.7 \times 10^6 - 5 \times 10^5$
$$= 3.7 \times 10^6 - 0.5 \times 10^6$$
$$= (3.7 - 0.5) \times 10^6$$
$$= 3.2 \times 10^6$$

(b) $8 \times 10^{-3} - 4 \times 10^{-5}$
$$= 8 \times 10^{-3} - 0.04 \times 10^{-3}$$
$$= (8 - 0.04) \times 10^{-3}$$
$$= 7.69 \times 10^{-3}$$

(c) $6 \times 10^4 \times 7 \times 10^3$
$$= (6 \times 7) \times (10^4 \times 10^3)$$
$$= 42 \times 10^{4+3}$$
$$= 4.2 \times 10^8$$

(d) $\dfrac{3 \times 10^{-6}}{4 \times 10^{-2}}$
$$= \dfrac{3}{4} \times \dfrac{10^{-6}}{10^{-2}}$$
$$= 0.75 \times 10^{-6-(-2)}$$
$$= 7.5 \times 10^{-5}$$

15 (a) $16 \times 1.66 \times 10^{-24}$
$$= 26.56 \times 10^{-24}$$
$$= 2.656 \times 10^{-23}$$

(b) $2 \times 1.66 \times 10^{-24} + 2.656 \times 10^{-23}$
$$= 0.332 \times 10^{-23} + 2.656 \times 10^{-23}$$
$$= 2.988 \times 10^{-23}$$

16 (a) 4.5×10^6 km

(b) 1.8×10^2 s

Praktis Sumatif

1 C   **2** C   **3** A   **4** B   **5** D

6 (a)

2	4 000
(b) 3	10
(c) 4	0.3
(d) 5	0.007

7 (a) 4

(b) 1.7

8 (a) $A = 7.5$, $n = 5$

(b) (i) 1.0×10^{-9}

(ii) 1.050×10^{-9}

9 (a) 4.96×10^{-3}

(b) (i) 5.04×10^{-3}

(ii) 2.48×10^{-4}

10 (a) 1.8×10^6

(b) 1.32×10^{-5}

(c) 1.3×10^3

11 (a) 3.56×10^6

(b) 5×10^{11}

12 8.02×10^{-2}

13 (a) 5×10^2 cm

(b) 1.38×10^{-1} kg

14 (a) 5.44×10^8 m²

(b) 1.34×10^5 ekar/*acres*

Praktis 3

Praktis Formatif

1 D

2 (a) Akaun simpanan, Akaun semasa, Akaun simpanan tetap
Saving accounts, Current accounts, Fixed deposit accounts

(b) Hartanah, Amanah saham, Saham
Properties, Unit trusts, Shares

3 (a) RM46.80

(b) RM78

4 (a) 8%

(b) 4 tahun 4 bulan
4 years 4 months

(c) RM14 000

5 (a) $2\,000(1 + 0.04 \times 2)$
$$= \text{RM2 160}$$

(b) $2\,000(1 + 0.04 \times 5)$
$$= \text{RM2 400}$$

6 (a) (i) RM5 600

(ii) RM7 400

(iii) RM8 000

(b) (i) ✓

7 (a) (i) RM3 720

(ii) RM3 787.40

(b) (i) B

(ii) 67.40

8 (a) RM973.32, RM173.32

(b) RM1 897.98, RM3 97.98

(c) RM1 498.64, RM298.64

(d) RM7 630.13, RM3 430.13

9 (a) (i) RM2 136.80

(ii) RM2 148.73

(iii) RM2 154.98

(b) (i) ✓

10 (a) (i) 276.26   (ii) 372.22

(iii) 671.27   (iv) 1 760.00

(b) bertambah/*increases*

11 (a) 30%
   (b) 25%
   (c) 20%
   (d) 40%

12 (a) (i) 20%
       (iii) 50%
   (b) Masa; Masa yang lebih pendek mempunyai risiko yang lebih tinggi.
       Time; A shorter time has higher risk.

13 (a) Keuntungan pada tahun pertama
       Profit on the first year
       $= RM10\,000 \times \dfrac{8}{100}$
       $= RM800$
       Jumlah pulangan pada tahun pertama
       Total return on the first year
       $= RM10\,000 + RM800$
       $= RM10\,800$
   (b) Keuntungan pada tahun kedua
       Profit on the second year
       $= RM10\,800 \times \dfrac{12}{100}$
       $= RM1\,296$
       Jumlah pulangan pada tahun kedua
       Total return on the second year
       $= RM10\,800 + RM1\,296$
       $= RM12\,096$
   (c) Nilai pulangan pelaburan dalam dua tahun
       Return value of investment in two years
       $= \dfrac{RM(12\,096 - 10\,000)}{RM10\,000} \times 100\%$
       $= 20.96\%$

14 (a) RM26 450
   (b) 14.9%

15 (a) RM28 000
   (b) 28%

16 (a) Rendah/*Low*
   (b) Tinggi/*High*
   (c) Sederhana/*Medium*
   (d) Sederhana/*Medium*

17 (a)

I	RM4 635
II	RM4 900

(b) Pelaburan saham ABX, pulangan lebih tinggi.
    Investment ABX, higher return.

18 (a) Kecairan tinggi
       High liquidity
   (b) Kecairan sederhana
       Medium liquidity
   (c) Kecairan sederhana
       Medium liquidity
   (d) Kecairan rendah
       Low liquidity

19 (a) RM11.90
   (b) RM1.69

20 (a) (i) 12 000
       (ii) 5 400
       (iii) 5 000
   (b) RM2.24
   (c) Mengurangkan kos sesyer.
       Reduce cost per share.

21 (a) (i) 4 800
       (ii) 21 200
       (iii) 9 200
       (iv) 16 500
   (b) (i) 51.7 sen
       (ii) RM5 040

22 RM8 933.61

23 RM7 200

24 B

25 (a) Hutang/*Debt*
   (b) Kredit/*Credit*

26 (a) Kredit/*Credit*
   (b) Hutang/*Debt*
   (c) Hutang /*Debt*
   (d) Kredit /*Credit*

27 (a) ✓
   (c) ✓
   (d) ✓

28 (a) Kekurangan kad kredit
       Disadvantage of credit card
   (b) Kelebihan kad kredit
       Advantage of credit card
   (c) Kelebihan kad kredit
       Advantage of credit card
   (d) Kekurangan kad kredit
       Disadvantage of credit card

29 (a) RM5.31
   (b) RM55.72

30 (a) (i) RM1 067.50
       (ii) RM1 480.17
       (iii) RM25.48
   (b) RM148.37

31 (a) RM50
   (b) RM75

(c) RM100

32 (a) **Situasi 1/*Situation* 1**

Bulan Month	Faedah *Interest* (RM)	Baki *Balance* (RM)
1	23.75	1 923.75
2	22.80	1 846.55
3	21.83	1 768.38
4	20.85	1 689.23

Situasi 2/*Situation* 2

Bulan Month	Faedah *Interest* (RM)	Baki *Balance* (RM)
1	18.75	1 518.75
2	12.73	1 031.48
3	6.64	538.12
4	0.48	38.60

(b) Bulan ke-4/*4th month*, RM38.60
(c) Situasi 2/*Situation* 2, RM50.63

33 (a) (i) RM2 809
       (ii) RM78.03
   (b) (i) RM4 590
       (ii) RM153

Praktis Sumatif

1 B   2 B   3 D   4 A   5 B
6 (a) (i) RM10 800
       (ii) RM12 096
   (b) (i) 20.96%
7 (a) RM232
   (b) Skim A; $r = 4.59\%$ bagi skim A dan $r = 4.75\%$ bagi skim B
       Loan scheme A; $r = 4.59\%$ *for scheme* A *and* $r = 4.75\%$ *for scheme* B
8 (a) $k = 1$
   (b) RM13 757.04
   (c) RM109.46

Praktis 4

Praktis Formatif

1 A

2 (a) (i) $\dfrac{GH}{AB} = 2$ $\dfrac{HI}{BC} = 2$

$$\frac{IJ}{CD} = 2 \qquad \frac{JK}{DE} = 2$$

$$\frac{KL}{EF} = 2 \qquad \frac{GL}{AF} = 2$$

(ii) $\dfrac{PQ}{AB} = \dfrac{3}{4} \qquad \dfrac{QR}{BC} = \dfrac{1}{2}$

$$\frac{RS}{CD} = 1 \qquad \frac{ST}{DE} = 1$$

$$\frac{TU}{EF} = \frac{1}{2} \qquad \frac{PU}{AF} = \frac{3}{4}$$

(b) (i) ✓   (ii) ✗   (iii) ✓
    (iv) ✗   (v) ✓   (vi) ✗

3 (a) Bukan lukisan berskala
    Not a scale drawing
   (b) Lukisan berskala
    A scale drawing
   (c) Lukisan berskala
    A scale drawing

4 I dan/*and* IV

5 (a) ✓   (b) ✓

6 (a) $1 : 2$ (b) $1 : \dfrac{1}{2}$

   (c) $1 : \dfrac{1}{3}$ (d) $1 : \dfrac{3}{4}$

7 (a) $1 : 3$
   (b) $1 : 1$
   (c) $1 : \dfrac{1}{2}$

8 $\dfrac{H}{3.2} = \dfrac{1}{\frac{1}{5}}$

   $H = 5 \times 3.2$
     $= 16$ cm

9 $\dfrac{PQ}{5} = 6$

   $PQ = 30$ cm

10 (a) ✓
    (b) ✗

11 716.4 cm^2

12
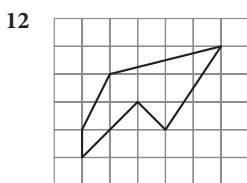
13 216
14 3
15 500 km

1 B   **2** A   **3** B   **4** B   **5** A
6 (a) $1 : 60$

(b) $x = 39$, $y = 36.6$

7 (a) $1 : \dfrac{1}{2}$

   (b)

8

9

10

11
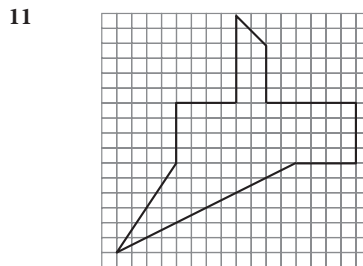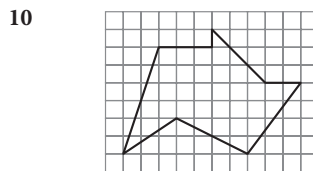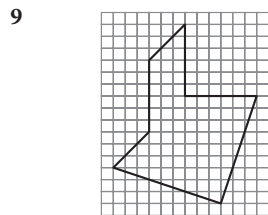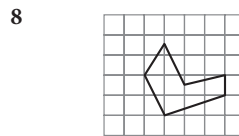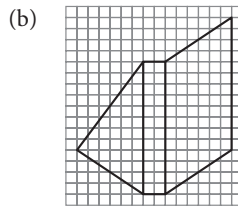
12 (a) 9.2 m
    (b) 3.1 m
13 $1 : 1\,250$
14 Panjang/*Length* = 96 cm,
   lebar/*width* = 38.4 cm

Praktis 5

1 C   **2** D

3 (a)

PQ	QR

   (b)

PR	PS

---

4 (a) kos x
   (b) tan x
   (c) sin x

5 (a) (i) $\dfrac{BE}{AE} = \dfrac{CF}{AF} = \dfrac{DG}{AG}$

     (ii) $\dfrac{AB}{AE} = \dfrac{AC}{AF} = \dfrac{AD}{AG}$

     (iii) $\dfrac{BE}{AB} = \dfrac{CF}{AC} = \dfrac{DG}{AD}$

   (b) (i) ✓
      (ii) ✓
      (iii) ✓

   (c)

Nisbah/*Ratio* (a)(i)		tan x
Nisbah/*Ratio* (a)(ii)		sin x
Nisbah/*Ratio* (a)(i)		kos x

6 (a)

ABC	0.288	0.962	0.3
ABD	0.515	0.858	0.6
ABD	0.671	0.746	0.9

   (b) (i) Betul/*Correct*
      (ii) Salah/*Wrong*
      (iii) Salah/*Wrong*

7 (a) 0.75
   (b) 0.6
   (c) 0.8

8 $PQ^2 = 65^2 - 25^2$
     $= 3\,600$
   $PQ = 60$ cm

   kos $\theta = \dfrac{60}{65}$

      $= \dfrac{12}{13}$

9 (a) 11.18 cm
   (b) 1.118
   (c) 0.7453

10 (a) $\dfrac{1}{2}$ (b) $\dfrac{1}{2}$ (c) $\sqrt{3}$

    (d) $\dfrac{\sqrt{3}}{2}$ (e) $\dfrac{1}{\sqrt{3}}$ (f) $\dfrac{\sqrt{3}}{2}$
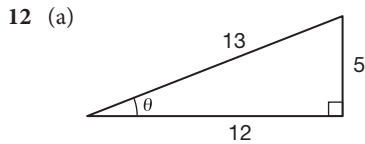
11 (a) $\dfrac{LM}{20} = \dfrac{7}{10}$

     $LM = \dfrac{7}{10} \times 20$

       $= 14$ cm

(b) $\dfrac{PQ}{8} = 1.4$

$\quad PQ = 1.4 \times 8$

$\qquad = 11.2$ cm

(c) $\dfrac{35}{AC} = \dfrac{7}{8}$

$\quad AC = \dfrac{7}{8} \times 35$

$\qquad = 40$ cm

12 **(a)**

(b) (i) $\dfrac{5}{13}$

$\quad$ (ii) $\dfrac{12}{13}$

13 (a) ✓ $\qquad$ (b) ✗

14 (a) $66°\,25'$

$\quad$ (b) $32°\,44'$

$\quad$ (c) $35°\,16'$

15 D

16 (a) ✗ $\qquad$ (b) ✓

17 $45°$

18 (a) 22 cm

$\quad$ (b) $45°\,34'$

19 **(a)** 36.4 m

$\quad$ (b) $36°\,3'$

20 **(a)** 20 m

$\quad$ (b) $26°\,34'$

Praktis Sumatif

1 B $\quad$ **2** B $\quad$ **3** B $\quad$ **4** D $\quad$ **5** A

6 (a) $\dfrac{5}{6}$ $\qquad$ (b) 0.9798

7 (a) $\dfrac{5}{6}$ $\qquad$ (b) $51°\,20'$

8 (a) AC $\quad$ (b) BC $\quad$ (c) AB

$\quad$ (d) $\dfrac{AB}{BC}$ $\quad$ (e) $\dfrac{AC}{BC}$ $\quad$ (f) $\dfrac{AB}{AC}$

9 (a) 0.6614 $\qquad$ (b) $30°\,6'$

10 (a) $\dfrac{5}{13}$ $\qquad$ (b) $24°\,47'$

11 (a) 23.07 cm

$\quad$ (b) $46°\,22'$

12 32.9 m

13 (a) 188 m

$\quad$ (b) $4°\,20'$

Praktis 6

Praktis Formatif

1 B

2 (a) Sudut pada pusat yang dicangkum lengkok AD.
$\quad$ *Angle at the centre subtended by arc AD.*

$\quad$ (b) Sudut pada lilitan yang dicangkum lengkok AD.
$\quad$ *Angle at the circumference subtended by arc AD.*

$\quad$ (c) Sudut pada lilitan yang dicangkum lengkok BC.
$\quad$ *Angle at the circumference subtended by arc BC.*

$\quad$ (d) Sudut pada lilitan yang dicangkum lengkok AC.
$\quad$ *Angle at the circumference subtended by arc AC.*

3 (a) PQ

$\quad$ (b) (i) $\angle PRQ, \angle PSQ$
$\qquad$ (ii) $\angle RPS, \angle RQS$

$\quad$ (c) (i) 2

$\qquad$ (ii) $\dfrac{1}{2}$

$\qquad$ (iii) RQS

4 $x = 42°, y = 35°$

5 (a) ✓ $\quad$ (b) ✓ $\quad$ (c) ✗

6 C

7 (a) $\angle BAD = 90°$

$\quad x + 38° = 90°$

$\qquad x = 52°$

$\quad$ (b) $y + 25° = 38°$

$\qquad y = 13°$

$\quad$ (c) $\angle BOC = 180° - 25 - 25°$

$\qquad = 130°$

$\quad z = \dfrac{1}{2} \times 130°$

$\qquad = 65°$

8 B

9 (a) $ACDE$

$\quad$ (b) $s + u, t + v$

10 (a) $=$ $\qquad$ (b) $=$

$\quad$ (c) $\neq$ $\qquad$ (d) $\neq$

11 (a) ✓ $\qquad$ (b) ✗

12 $\qquad\qquad \angle PRQ = 43°$

$\quad\quad \angle QPS + \angle QRS = 180°$

$\quad (55° + x) + (35° + 43°) = 180°$

$\qquad\qquad\qquad\qquad x = 47°$

13 $x = 123°, y = 37°$

14 A

---

15 CD, GH

16 (a) OC $\quad$ (b) AC $\quad$ (c) $90°$
$\quad$ (d) $90°$ $\quad$ (e) CAO $\quad$ (f) AOC

17 (a)

(i) a	d
(ii) b	c

$\quad$ (b) (i) $a = d$
$\qquad$ (ii) $b = c$

18 (a) (i) ✓ $\qquad$ (ii) ✓
$\quad$ (b) (i) ✓ $\qquad$ (ii) ✗

19 (a) $2x = 32°$

$\qquad x = 16°$

$\quad$ (b) $y + 50° = 62°$

$\qquad\quad y = 12°$

20 (a) $32°$

$\quad$ (b) $64°$

21 $x = 55°, y = 40°$

22 $x = 150°, y = 75°, z = 40°$

23 (a) $120°$

$\quad$ (b) 20 cm

$\quad$ (c) 34.64 cm

24 C

25 $x = 48°, y = 21°$

26 (a) $67°$

$\quad$ (b) $\angle FPS + \angle PSR = 180°$, FP selari dengan RS./*FP is parallel to RS.*

27 $x = 104°, y = 38°$

28 $x = 50°, y = 140°, z = 76°$

Praktis Sumatif

1 B $\quad$ **2** C $\quad$ **3** C $\quad$ **4** B $\quad$ **5** B

6 (a) (i)

Sisi empat kitaran $ABCD$ Cyclic quadrilateral $ABCD$	$\angle BAD + \angle BCD = 180°$ $\angle ABC + \angle ADC = 180°$

$\quad$ (ii)

Sisi empat kitaran $BCDE$ Cyclic quadrilateral $BCDE$	$\angle CBE + \angle CDE = 180°$ $\angle BCD + \angle BED = 180°$
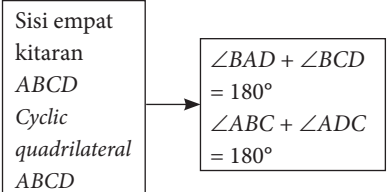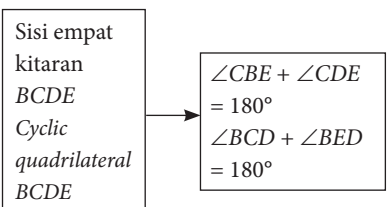
$\quad$ (b) $x = 80°, y = 50°, z = 20°, w = 80°$

7 $x = 45°, y = 50°$

8 $x = 50°, y = 70°, z = 45°$

9 $x = 60°, y = 24°, z = 30°$

10 $x = 76°, y = 92°, z = 11°$

Praktis 7

Praktis Formatif

1 C

2 (a) (b)
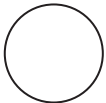
(c) (d)
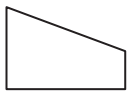
3 (a) (b)

4 (a)

(b)
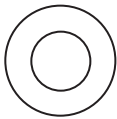
5 (a)
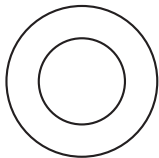
(b)
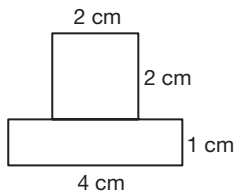
6
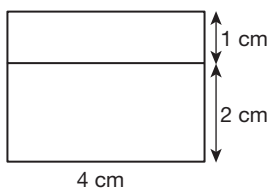
7 (a)
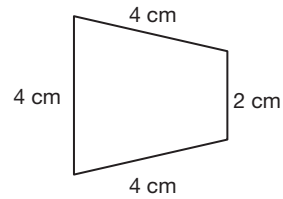
(b)
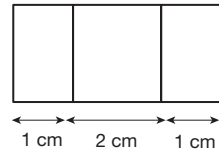
8 (a) ✓
   (b) ✗
   (c) ✗
   (d) ✓
   (e) ✓

9 (a) *PQ, PS, QR, RS*
   (b) (i) ∠PQR, ∠QPS, ∠QRS, ∠PSR, ∠PQT, ∠PST
       (ii) ∠PTS, ∠SPT, ∠PTQ, ∠TPQ, ∠QTR, ∠RTS
   (c) (i) sama/*same*
       (ii) berbeza/*different*

10 D

11 (a)

(b) (i)

(ii)

Jawapan

12 (c)

E/F   T/U   F/U E/T   (b)

C/D   D/S   C/R

R/S

B/A   Q/P A/P   B/Q

U/P T/S

R/Q

F/AE/D   C/B

(a)

13 (c)

M   N   M/N   (b)

J/K   G/H   C/J/G

C/D   D/K/H

B/A   B/F

F/E A/E

H   N   G   F

K   J

M   C   B

D/A

(a)

14 (b)

E/T   T   E   (c)

D/S   C/R S/R............D/C

A/P   A/B

P

B/Q P/Q

T/S R/Q

(a) A

E/D C/B

15 (a)

H

12 m

D   G

E   21 m

9 m   C

A   F

21 m

18 m

B

(b) RM16 708

1 C   **2** B   **3** A   **4** C   **5** A

6 (a) (i)

W/S   V/R

T/P   U/Q

(ii)

T/W   U   V

P/S   Q   R
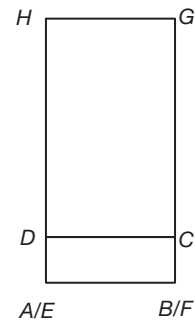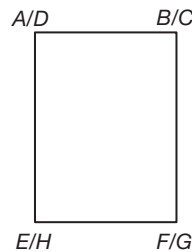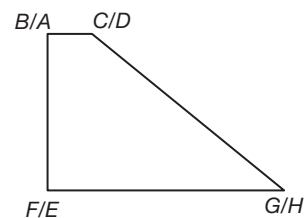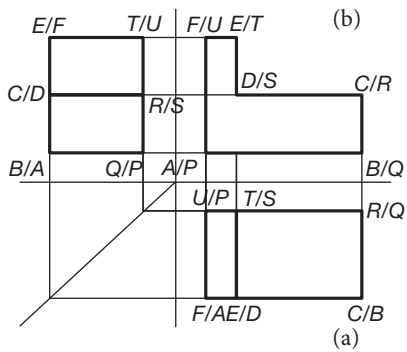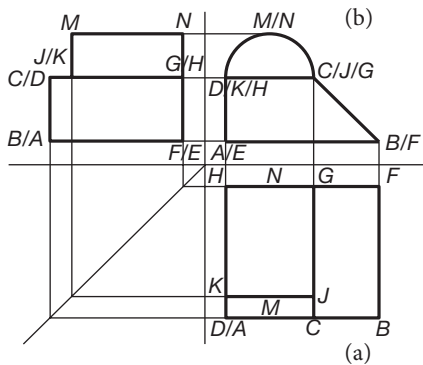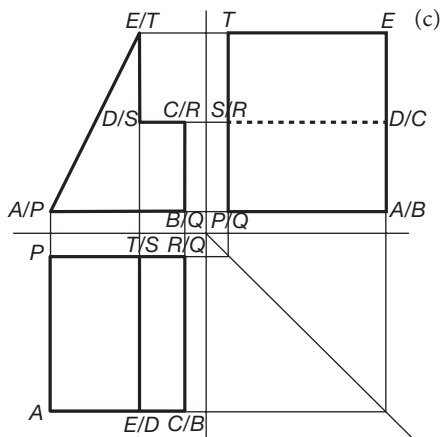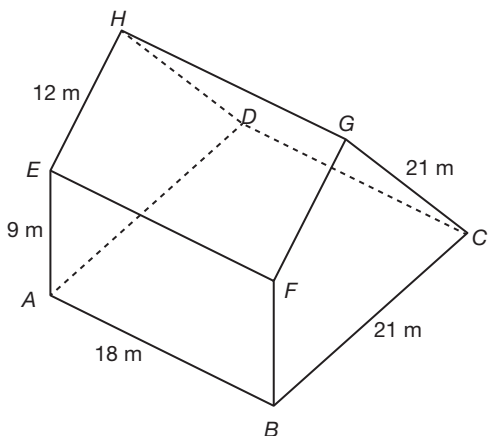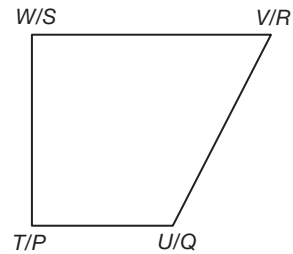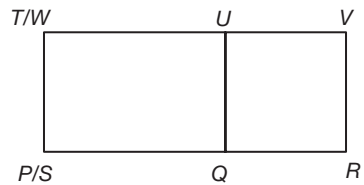
(b) (i) Sama/*Same*

(ii) Sama/*Same*

(iii) Sama/*Same*

(c) (i) Berbeza/*Different*

(ii) Sama/*Same*

(iii) Berbeza/*Different*

7 (c)

S/T   T   S

(b)

Q/P   P   Q

U

R/U   ....R

L/K   L/M

M/N   K/N

T/N   S/M

U   R

P/K   Q/L

(a)

8 (b)

C/G   G   C   (c)

D/H   D

P/S   Q/R   S/R......P/Q

A/E   A/B/K

B/N/F K/M E/F N/M

G/F

H/E

S/N   R/M

D/A C/P/B Q/K

(a)
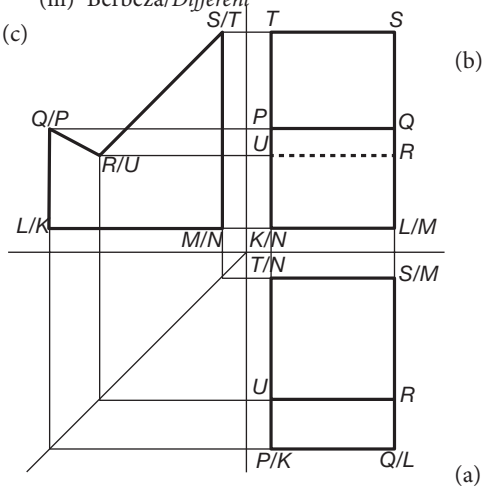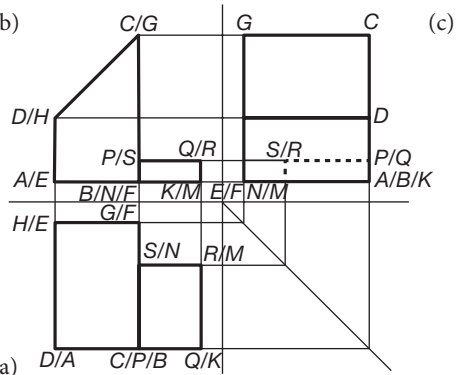
9 (a)
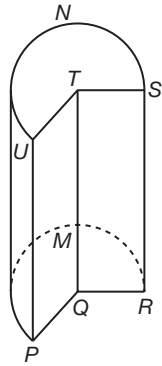
(b) 106°   (c) 6 210 cm³
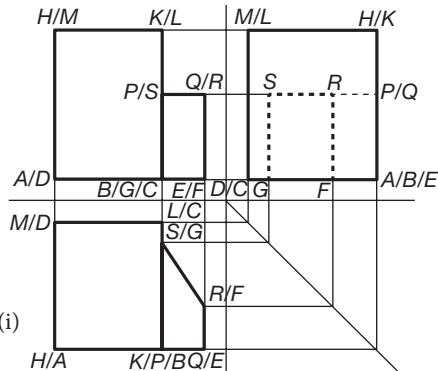
10 (a) (ii)   (iii)

(i)

(b) RM5 970

Praktis 8

1 A
2 sebuah bulatan/*a circle*
3 (a) Satu lengkung /*A curve*
   (b) Satu lengkok bulatan/*An arc of a circle*
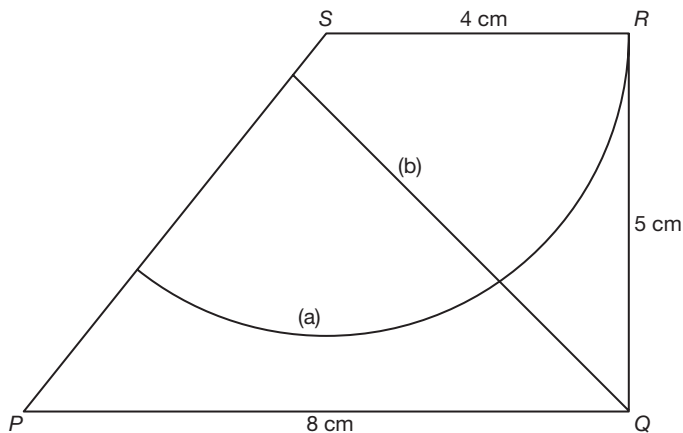
(c) Satu lengkung/*A curve*
(d) Satu garis lurus mengufuk/*A horizontal straight line*
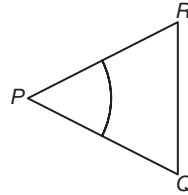**4** (a) Sfera/*Sphere*   (b) Silinder/*Cylinder*
5 D
6 Sebuah bulatan dengan pusat *A* dan jejari 4 cm.
   A circle with centre A and radius 4 cm.
7 (a) ✓
8 C
9

10 C
11 D

1 B   **2** C   **3** D   **4** B   **5** A
6 (a) Garis/*Line EF*
   (b) Lengkok *AH* bagi suatu bulatan dengan jejari 4 cm
      dan pusat *D*.
      Arc AH of a circle with radius 4 cm *and centre D.*
   (c) Garis/*Line CE*
7 (a) Pembahagi dua sama serenjang bagi *AB*
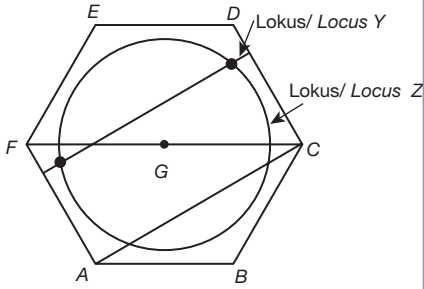   *Perpendicular bisector of AB*
   (b) Pembahagi dua sama ∠*BAC*
      Bisector of ∠BAC
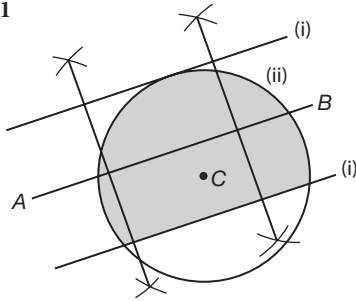
8

9
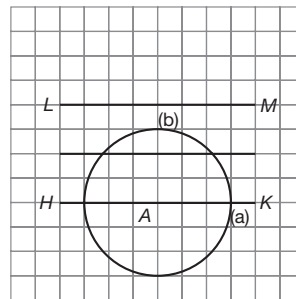
10 (a) Garis lurus/*Straight line AGD*
(b), (c) (i)

(c) (i)   1

11

Praktis 9

Praktis Formatif

1 B

2 (a) (i) $\dfrac{5-(-1)}{1-(-2)}=2$

(ii) 3

(b) (i) ✓   (ii) ✓

(c) Kecerunan: *m*, Pintasan-*y*: *c*
Gradient: *m*, *y-intercept*: *c*

3 (a)

4	7

(b)

−2	10

(c)

−1	0

(d)

0	6

4 (a) $-4y = -5x + 8$

$y = \dfrac{-5x+8}{-4}$

$y = \dfrac{5}{4}x - 2$

(b) $\dfrac{y}{3} = -\dfrac{x}{10} + 1$

$y = -\dfrac{3}{10}x + 3$

(c) $\dfrac{7}{3}x - y = 7$

$\dfrac{\dfrac{7}{3}x - y}{7} = 1$

$\dfrac{x}{3} - \dfrac{y}{7} = 1$

5 (a) ✓   (d) ✓

6 (a) $y = \dfrac{2}{3}x + 3, \dfrac{2}{3}, 3$

(b) $y = -\dfrac{3}{2}x + 6, -\dfrac{3}{2}, 6$

7 (a) $x = 2, y = 5$

$4x - 3 = 4 \times 2 - 3$

$= 5$

$y = 4x - 3$

Titik *A* yang terletak pada garis lurus $y = 4x - 3$ memenuhi persamaan garis lurus $y = 4x - 3$.
Point A that lies on the straight line $y = 4x - 3$ satisfies the equation of the straight line $y = 4x - 3$.

(b) $x = -1, y = -3$

$4x - 3 = 4 \times (-1) - 3$

$= -7$

$y \neq 4x - 3$

Titik *B* yang tidak terletak pada garis lurus $y = 4x - 3$ tidak memenuhi persamaan garis lurus $y = 4x - 3$.
Point B that does not lie on the straight line $y = 4x - 3$ does not satisfy the equation of the straight line $y = 4x - 3$.

8 (a) (4, 1), (−2, 4), (12, −3)
(b) (0, 2), (2, 4), (−3, 9)

9 (a) $y = -x + 2$
(b) $\dfrac{x}{3} - y = 1$

(c) $x + \dfrac{1}{2}y = 1$

(d) $3x - y = 6$

10 (a)

AB	$\dfrac{1}{2}$
CD	$\dfrac{1}{2}$
EF	$\dfrac{1}{2}$

(b) sama/*equal*

11 (a) $x - y = 4$

(b) $x + \dfrac{y}{5} = 1$

(c) $2x + 3y = 36$

(d) $\dfrac{x}{4} - y = 1$

12 (a) $y = 5$
(b) $x = 4$
(c) $y = -3$
(d) $x = -3$

13 (a) ✓   (b) ✓
(c) ✗   (d) ✗

14 (a) $y = 4x - 8$
(b) $y = -x + 2$

15 (a) $y = \dfrac{1}{2}x - 2$

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

16 (a)

−2	2	$-\dfrac{x}{2} + \dfrac{y}{2} = 1$

(b)

3	−1	$\dfrac{x}{3} - y = 1$

(c)

−3	−2	$-\dfrac{x}{3} - \dfrac{x}{2} = 1$

(d)

4	2	$\dfrac{x}{4} + \dfrac{y}{2} = 1$

17 (a) $m = \dfrac{-6-2}{-1-3}$

$= \dfrac{-8}{-4} = 2$

(b) (i) $2 = 2 \times 3 + c$

$2 = 6 + c$

$c = -4$

(ii) $-6 = 2 \times (-1) + c$

$-6 = -2 + c$

$c = -4$

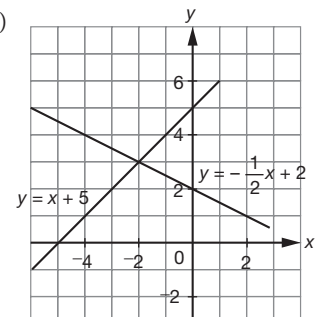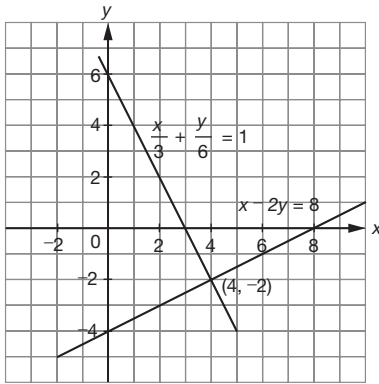**18** (a) $y = x - 8$
(b) $y = 5x + 3$
(c) $y = -3x + 5$

(d) $y = -\dfrac{x}{4} - 2$

19 (a)

(b) (−2, 3)

20 (a)

(b) (4, −2)

(c) (4, −2)

21 (a) (2, 3)

(b) (−1, −2)

(c) (3, −4)

(d) (−2, 5)

22 (a) 4

(b) $y = -2$

(c) $y = -4x + 22$

(d) $\left(\dfrac{3}{2}, -2\right)$

Praktis Sumatif

1 C **2** C **3** A **4** A **5** D

6 (a) $p = -\dfrac{5}{2}, q \neq 0$

(b) $q = 0, p \neq -\dfrac{5}{2}$

7 7

8 (a) (i) $\dfrac{x}{2} - \dfrac{y}{4} = 1$

(ii) $2x - y = -6$

(b) l

9
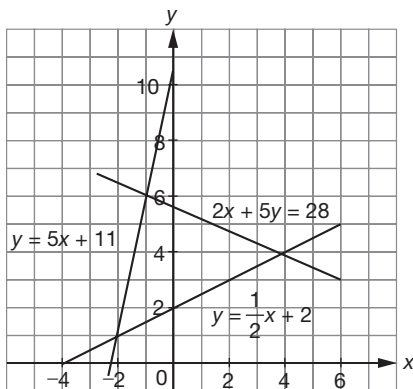
(−2, 1), (4, 4) (−1, 6)

10 $A(3, 5), B(3, 8), C(-2, 0)$

11 $P(-2, 4), R(1, 1), S(-4, -4)$

12 (a) −4

(b) (i) $y = -3$

(ii) $x = -4$

(c) (i) $2x + 3y = -5$

(ii) $2x + 3y = 1$

13 (a) $k = 5, r = 1$

(b) (i) $y = \dfrac{2}{3}x - 5$

(ii) $y = -x$

(c) (6, −1)

14 (a) $y = -2$

(b) $y = -\dfrac{5}{2}x - 2$

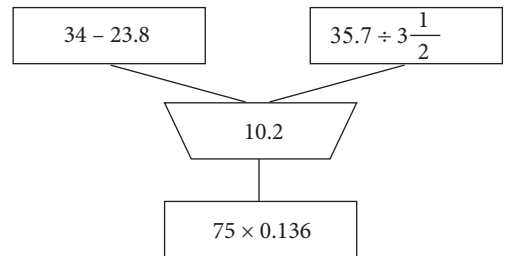(c) $\dfrac{21}{5}$

(d) (i) $5x - 3y = 31$

(ii) (2, −7)

Kertas Model PT3

Bahagian A

1 B	**2** C	**3** C	**4** C	**5** B
6 B	**7** B	**8** A	**9** C	**10** A
11 B	**12** C	**13** D	**14** B	**15** B
16 B	**17** C	**18** D	**19** A	**20** C

Bahagian B

21 (a)

(b) Palsu/*False*

22 (a) LQ

(b) (i) 4

(ii) 5

(iii) 3

23 (a)

J10

Praktis Intensif Matematik Tingkatan 3
Jawapan
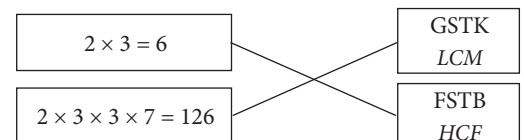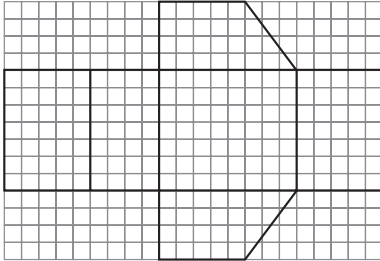
(b) $\angle t = \angle u$, $\angle p = \angle q + \angle s$

24 (a) 182

    (b)

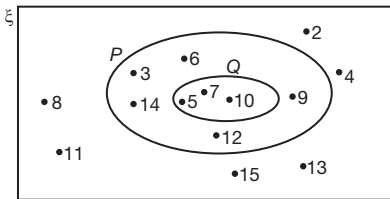**25** (a) (i) ✗   (ii) ✓   (iii) ✓

    (b) sektor minor/*minor sector*

Bahagian C

26 (a) (i) 7.010

        (ii) $4\,302 \times 10^{-6}$

    (b) (i)

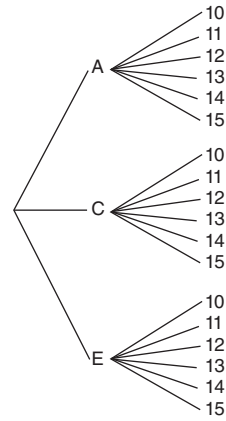   (ii) {2, 4, 8, 11, 13, 15}

    (c) (i) $6(3x - 5)(x + 2)$

        (ii) $\dfrac{23k - 45}{6k(k - 3)}$

27 (a) $-8, -7, -6, -5$

    (b) (i) $p = \dfrac{Q}{3m^2}$

        (ii) 24

(c) (i)

    (ii) (a) $\dfrac{4}{9}$

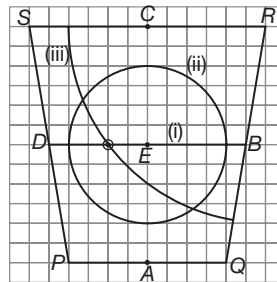   (b) $\dfrac{1}{3}$

28 (a) (i) 22.5°

        (ii) 8

    (b) 20 m

    (c) (i) Mac/*Mar*

        (ii) 250

29 (a) (i) 5

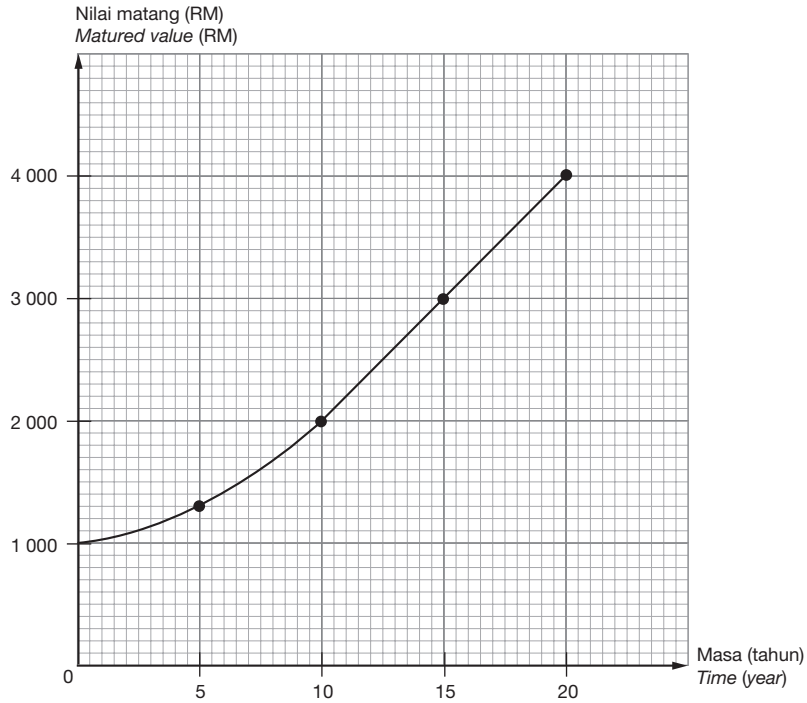   (ii) $-1.1, 4.6$

    (b) (i) 3.42 m

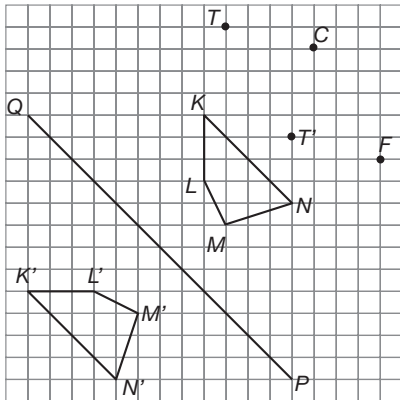   (ii) 4.37 m

    (c)

30 (a) (i)

10	2 061
20	4 248

(ii)

Nilai matang (RM)
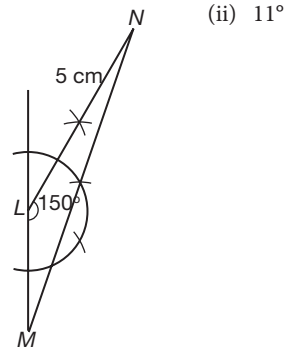*Matured value* (RM)

(b) RM2 859

(c) (i) 4

  (ii) $y = \dfrac{4}{3}x + \dfrac{14}{3}$

31 (a) (i) Lawan arah jam/*Anticlockwise*

  (ii) , (iii)

(b) (i)

5 cm

L 150°

(ii) 11°

(c)

(ii)

(iii)

(i)