

# PENYELESAIAN LENGKAP

## PRAKTIS 4

### Praktis Formatif

1 Jawapan/Answer: D

2 (a) (i) Panjang setiap sisi poligon ABCDEF adalah berbeza.

*The length of each side of the polygon ABCDEF is different.*

(ii) Setiap sudut pedalaman poligon ABCDEF adalah berbeza.

*Each interior angle of the polygon ABCDEF is different.*

(iii) Poligon ABCDEF adalah sebuah poligon tak sekata.

*The polygon ABCDEF is an irregular polygon.*

(b) (i) Panjang setiap sisi poligon ABCDEFGHIJ adalah sama.

*The length of each side of the polygon ABCDEFGHIJ is the same.*

(ii) Setiap sudut pedalaman poligon ABCDEFGHIJ adalah sama.

*Each interior angle of the polygon ABCDEFGHIJ is the same.*

(iii) Poligon ABCDEFGHIJ adalah sebuah poligon sekata.

*The polygon ABCDEFGHIJ is a regular polygon.*

3 (a) Bilangan paksi simetri =

*Number of axes of symmetry*

Bilangan paksi simetri =  bilangan sisi

*Number of axes of symmetry =  number of sides*

Poligon KLM  sebuah poligon sekata.

8 (a)

	Bilangan sisi, $n$ <i>Number of sides, <math>n</math></i>	Bilangan segi tiga <i>Number of triangles</i>	Hasil tambah sudut pedalaman <i>Sum of interior angles</i>
(i)	3	1	180°
(ii)	4	2	360°
(iii)	5	3	540°
(iv)	6	4	720°

(b) (i)  $n - 2$

(ii)  $(n - 2) \times 180^\circ$

Poligon KLM  a regular polygon.

(b) Bilangan paksi simetri =

*Number of axes of symmetry*

Bilangan paksi simetri  bilangan sisi

*Number of axes of symmetry  number of sides*

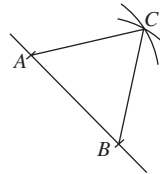
Poligon PQRST  sebuah poligon sekata.

Poligon PQRST  a regular polygon.

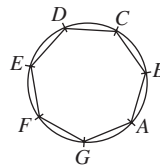
4 (a) ✓

(c) ✓

5



6



7 Sudut pedalaman bagi oktagon sekata

*Interior angle of regular octagon*

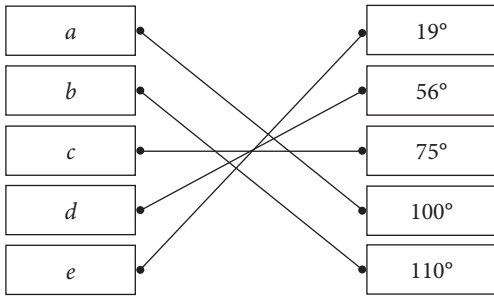
$$= \frac{(8 - 2) \times 180^\circ}{8}$$

$$= 135^\circ$$

$$y = 135^\circ$$

Jawapan/Answer: B

9 (a)



$$\begin{aligned} \text{(b) } a + b + c + d + e & \\ &= 100^\circ + 110^\circ + 75^\circ + 56^\circ + 19^\circ \\ &= 360^\circ \end{aligned}$$

- 10 (a)  $p + q + r + s + t + u = 360^\circ$   
 (b) Hasil tambah sudut-sudut pedalaman bagi poligon  
*Sum of interior angles of polygon*  
 $= (6 - 2) \times 180^\circ$   
 $= 720^\circ$   
 $a + b + c + d + e + f = 720^\circ$

- 11 Bilangan sisi/Number of sides = 5  
 Hasil tambah sudut-sudut pedalaman bagi poligon  
*Sum of interior angles of polygon*  
 $= (5 - 2) \times 180^\circ$   
 $= 540^\circ$   
 $x + 70^\circ + 100^\circ + 130^\circ + 140^\circ = 540^\circ$   
 $x = 100^\circ$

12  $n = 6$   
 $x = \frac{(6 - 2) \times 180^\circ}{6}$   
 $= 120^\circ$

- 13 (a) (i)  $m + 154^\circ + 132^\circ = 360^\circ$   
 (ii)  $m + 286^\circ = 360^\circ$   
 $m = 74^\circ$   
 (b) (i)  $p + 88^\circ + 139^\circ + 20^\circ = 360^\circ$   
 (ii)  $p + 247^\circ = 360^\circ$   
 $p = 113^\circ$

14 (a)  $x = \frac{360^\circ}{5}$   
 $= 72^\circ$   
 (b)  $x = \frac{360^\circ}{12}$   
 $= 30^\circ$

- 15  $20^\circ = \frac{360^\circ}{n}$   
 $n = \frac{360^\circ}{20^\circ}$   
 $= 18$   
 $\therefore$  Bilangan sisi poligon sekata itu ialah 18.  
 $\therefore$  Number of sides of the regular polygon is 18.

- 16 Sudut pedalaman bagi poligon sekata  
*Interior angle of regular polygon*  
 $= \frac{(10 - 2) \times 180^\circ}{10}$   
 $= 144^\circ$

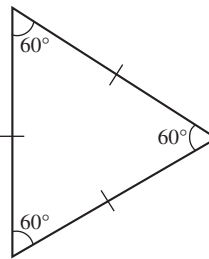
$$\begin{aligned} \angle QRS &= 144^\circ \\ \angle FRS &= 180^\circ - 144^\circ \\ &= 36^\circ \\ x &= 180^\circ - 36^\circ - 36^\circ \\ &= 108^\circ \end{aligned}$$

Jawapan/Answer: A

- 17 Sudut pedalaman bagi poligon PQRST  
*Interior angle of polygon PQRST*  
 $= \frac{(5 - 2) \times 180^\circ}{5}$   
 $= 108^\circ$   
 $\angle RST = 108^\circ$   
 $x = \frac{1}{2} \times (180^\circ - 108^\circ)$   
 $= 36^\circ$   
 $\angle QPT = 108^\circ$   
 $108^\circ = y + 63^\circ$   
 $y = 45^\circ$   
 $x + y = 36^\circ + 45^\circ$   
 $= 81^\circ$

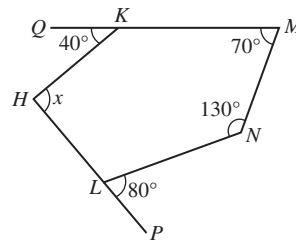
### Praktis Sumatif

1



Jawapan/Answer: B

2

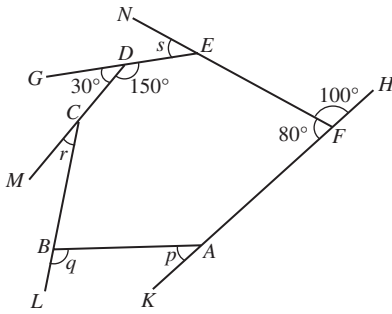


$$\begin{aligned} \angle HLN &= 180^\circ - 80^\circ \\ &= 100^\circ \\ \angle HKM &= 180^\circ - 40^\circ \\ &= 140^\circ \end{aligned}$$

- Hasil tambah sudut-sudut pedalaman bagi HLNMK  
*Sum of interior angles of HLNMK*  
 $= (5 - 2) \times 180^\circ$   
 $= 540^\circ$   
 $x + 140^\circ + 70^\circ + 130^\circ + 100^\circ = 540^\circ$   
 $x + 440^\circ = 540^\circ$   
 $x = 100^\circ$

Jawapan/Answer: C

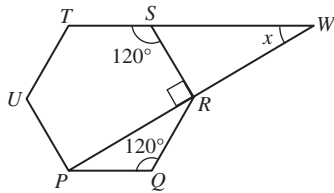
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$$\begin{aligned}\angle GDM &= 180^\circ - 150^\circ \\ &= 30^\circ \\ \angle EFH &= 180^\circ - 80^\circ \\ &= 100^\circ \\ p + q + r + 30^\circ + s + 100^\circ &= 360^\circ \\ p + q + r + s + 130^\circ &= 360^\circ \\ p + q + r + s &= 230^\circ\end{aligned}$$

Jawapan/Answer: C

4

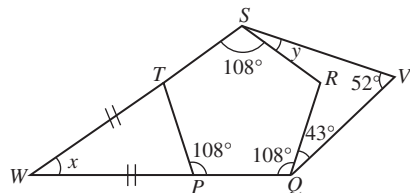


Sudut pedalaman bagi PQRSTU  
Interior angle of PQRSTU  
$$= \frac{(6 - 2) \times 180^\circ}{6}$$

$$\begin{aligned}&= 120^\circ \\ \angle PRQ &= \frac{1}{2} \times (180^\circ - 120^\circ) \\ &= 30^\circ \\ \angle PRS &= 120^\circ - 30^\circ \\ &= 90^\circ \\ \angle RSW &= 180^\circ - 120^\circ \\ &= 60^\circ \\ x + 60^\circ &= 90^\circ \\ x &= 30^\circ\end{aligned}$$

Jawapan/Answer: C

5



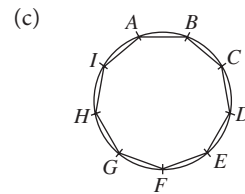
Sudut pedalaman bagi PQRST  
Interior angle of PQRST  
$$= \frac{(5 - 2) \times 180^\circ}{5}$$

$$\begin{aligned}&= 108^\circ \\ \angle TPW &= 180^\circ - 108^\circ \\ &= 72^\circ\end{aligned}$$

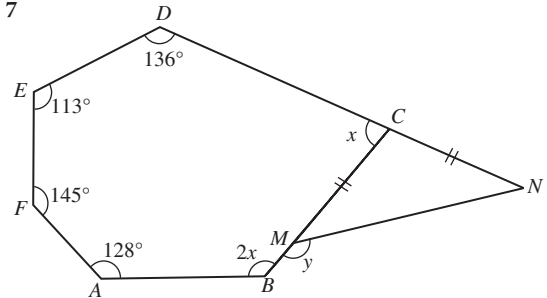
$$\begin{aligned}x &= 180^\circ - 72^\circ - 72^\circ \\ &= 36^\circ \\ 36^\circ + 108^\circ + y + 52^\circ + 43^\circ + 108^\circ &= 360^\circ \\ y + 347^\circ &= 360^\circ \\ y &= 13^\circ\end{aligned}$$

Jawapan/Answer: D

- 6 (a) Bilangan sisi = 9  
Number of sides = 9  
Bilangan paksi simetri bagi nonagon sekata ialah 9.  
Number of axes of symmetry of regular nonagon is 9.
- (b) Sudut pedalaman bagi ABCDEFGHI  
Interior angle of ABCDEFGHI  
$$= \frac{(9 - 2) \times 180^\circ}{9}$$
  
$$= 140^\circ$$



7

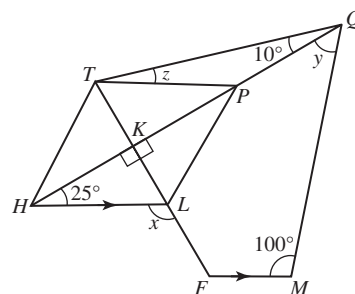


Hasil tambah sudut-sudut pedalaman bagi ABCDEF  
Sum of interior angles of ABCDEF  
$$= (6 - 2) \times 180^\circ$$
  
$$= 720^\circ$$

$$\begin{aligned}2x + x + 136^\circ + 113^\circ + 145^\circ + 128^\circ &= 720^\circ \\ 3x + 522^\circ &= 720^\circ \\ 3x &= 198^\circ \\ x &= 66^\circ\end{aligned}$$

$$\begin{aligned}\angle MCN &= 180^\circ - 66^\circ \\ &= 114^\circ \\ \angle CMN &= \frac{1}{2} \times (180^\circ - 114^\circ) \\ &= 33^\circ \\ y &= 180^\circ - 33^\circ \\ &= 147^\circ\end{aligned}$$

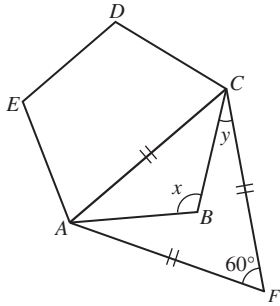
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$$\begin{aligned} \angle HKL &= 90^\circ \\ x &= 25^\circ + 90^\circ \\ x &= 115^\circ \\ \angle LFM &= 115^\circ \\ y + 100^\circ + 115^\circ + 90^\circ &= 360^\circ \\ y + 305^\circ &= 360^\circ \\ y &= 55^\circ \end{aligned}$$

$$\begin{aligned} \angle KPT &= 25^\circ \\ z + 10^\circ &= 25^\circ \\ z &= 15^\circ \end{aligned}$$

9



Sudut pedalaman bagi  $ABCDE$   
*Interior angle of  $ABCDE$*   
 $= \frac{(5 - 2) \times 180^\circ}{5}$   
 $= 108^\circ$

$$\begin{aligned} x &= 108^\circ \\ \angle ACB &= \frac{1}{2} \times (180^\circ - 108^\circ) \\ &= 36^\circ \\ y + 36^\circ &= 60^\circ \\ y &= 24^\circ \end{aligned}$$

- 10 (a) Hasil tambah sudut-sudut pedalaman bagi poligon  
 $= 1\,260^\circ$   
*Sum of interior angles of polygon*  $= 1\,260^\circ$   
 $(n - 2) \times 180^\circ = 1\,260^\circ$   
 $n - 2 = 7$   
 $n = 9$

Sudut pedalaman bagi poligon sekata  
*Interior angle of regular polygon*

$$\begin{aligned} &= \frac{1\,260^\circ}{9} \\ &= 140^\circ \\ x &= 140^\circ \end{aligned}$$

- (b)  $y + 140^\circ = 180^\circ$   
 $y = 40^\circ$   
 $x : y = 140^\circ : 40^\circ$   
 $= 7 : 2$