Jawapan

Praktis 6

Praktis Formatif

1

(a)	p	Sudut pada lilitan yang dicangkum oleh lengkok AD. *Angle at the circumference subtended by arc AD.*
(b)	q	Sudut pada pusat yang dicangkum oleh lengkok AD. *Angle at the centre subtended by arc AD.*
(c)	r	Sudut pada lilitan yang dicangkum oleh lengkok AC. *Angle at the circumference subtended by arc AC.*
(d)	s	Sudut pada lilitan yang dicangkum oleh lengkok BC. *Angle at the circumference subtended by arc BC.*

2 **A** Betul/*Correct*
B Salah/*Wrong*
C Betul/*Correct*
D Betul/*Correct*
Jawapan/*Answer*: **B**

3 (a) θ ialah sudut pada pusat yang dicangkum oleh lengkok minor PQ.
θ *is the angle at the centre subtended by the minor arc PQ.*

(b) (i) Sudut yang dicangkum oleh lengkok minor PQ pada lilitan ialah $\angle PRQ$ dan $\angle PSQ$.
Angles subtended by the minor arc PQ at the circumference are $\angle PRQ$ *and* $\angle PSQ$.

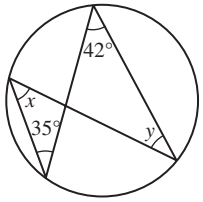
(ii) Sudut yang dicangkum oleh lengkok minor RS pada lilitan ialah $\angle RPS$ dan $\angle RQS$.
Angles subtended by the minor arc RS at the circumference are $\angle RPS$ *and* $\angle RQS$.

(c) (i) $\theta = 2 \times \angle PRQ$

(ii) $\angle PSQ = \frac{1}{2} \times \theta$

(iii) $\angle RPS = \angle RQS$

4



$x = 42°$, $y = 35°$

5 (a) ✓ (b) ✓ (c) ✗

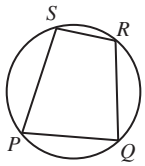
6 **A** Salah/*Wrong*
B Salah/*Wrong*
C Betul/*Correct*
D Salah/*Wrong*
Jawapan/*Answer*: **C**

7 (a) $\angle BAD = 90°$
$x + 38° = 90°$
$x = 52°$

(b) $y + 25° = 38°$
$y = 13°$

(c) $\angle BOC = 180° - 25° - 25°$
$= 130°$
$z = \frac{1}{2} \times 130°$
$= 65°$

8



Jawapan/*Answer*: **B**

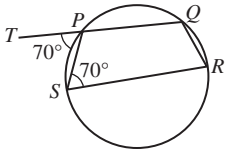
9 (a) $ACDE$ ialah sisi empat kitaran.
$ACDE$ *is the cyclic quadrilateral.*

(b) $s + u = 180°$
$t + v = 180°$

10 (a) $a + d = 180°$
(b) $b + f = 180°$
(c) $c + d \neq 180°$
(d) $h + f \neq 180°$

11 (a) $140° + 40° = 180°$ [✓]

(b)



$\angle TPS = \angle QRS$
$\angle TPS = \angle PSR$ [✗]

12 $\angle PRQ = 43°$

$\angle QPS + \angle QRS = 180°$

$(55° + x) + (35° + 43°) = 180°$

$x = 47°$

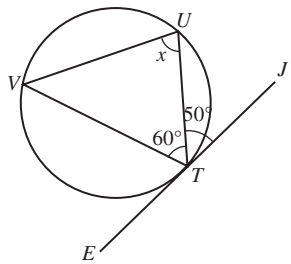
13 $x + 57° = 180°$

$x = 123°$

$2y = 74°$

$y = 37°$

14



$\angle ETV = 180° - 60° - 50°$

$= 70°$

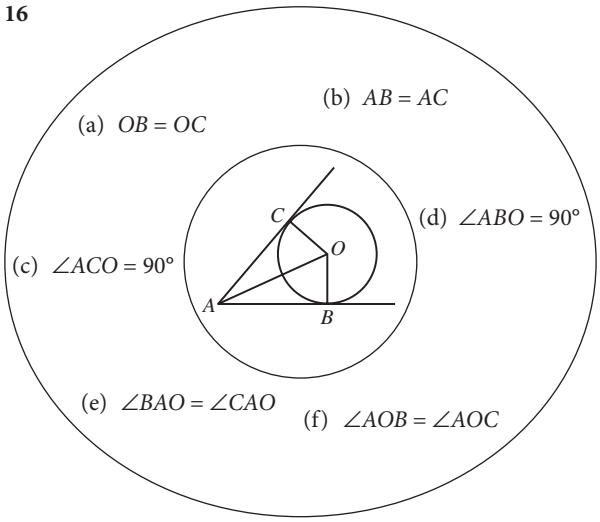
$x = 70°$

Jawapan/*Answer*: **A**

15 Tangen kepada bulatan ialah *CD* dan *GH*.

Tangents to the circle are CD and GH.

16

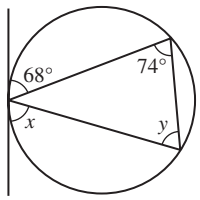


17 (a)

Sudut di antara tangen dengan perentas *Angle between tangent and chord*	Sudut dalam tembereng selang-seli yang dicangkum oleh perentas *Angle in alternate segment subtended by chord*
(i) *a*	*d*
(ii) *b*	*c*

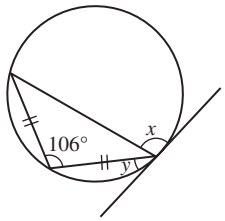
(b) (i) $a = d$ (ii) $b = c$

18 (a)



(i) $x = 74°$ [✓] (ii) $y = 68°$ [✓]

(b)



(i) $x = 106°$ [✓] (ii) $y = 53°$ [✗]

19 (a) $2x = 32°$

$x = 16°$

(b) $y + 50° = 62°$

$y = 12°$

20 (a) $\angle HKL = 90° - 58°$

$= 32°$

(b) $\angle KLP = \angle LKP = 58°$

$y + 58° + 58° = 180°$

$y + 116° = 180°$

$y = 64°$

21 $\angle PRQ = 180° - 150°$

$= 30°$

$x = 25° + 30°$

$= 55°$

Sudut refleks *POQ*/*Reflex angle POQ*

$= 360° - 150°$

$= 210°$

$\angle PSQ = \frac{1}{2} \times 210°$

$= 105°$

$\angle OPS = 90° - 25°$

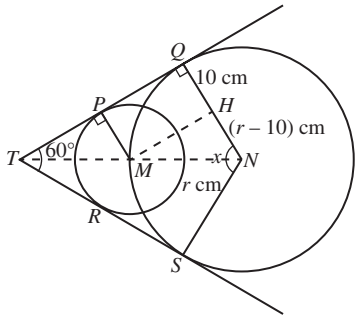
$= 65°$

$y + 105° + 65° + 150° = 360°$

$y + 320° = 360°$

$y = 40°$

22



(a) $x + 60° = 180°$

$x = 120°$

(b) $\angle MNQ = 60°$

$HQ = MP = 10$ cm

$\text{kos}\ \angle MNQ = \dfrac{HN}{MN}$

$\text{kos}\ 60° = \dfrac{r - 10}{r}$

$\dfrac{1}{2} = \dfrac{r - 10}{r}$

$r = 2(r - 10)$

$r = 2r - 20$

$r = 20$

Jejari bulatan berpusat N ialah 20 cm.

The radius of the circle with centre N is 20 cm.

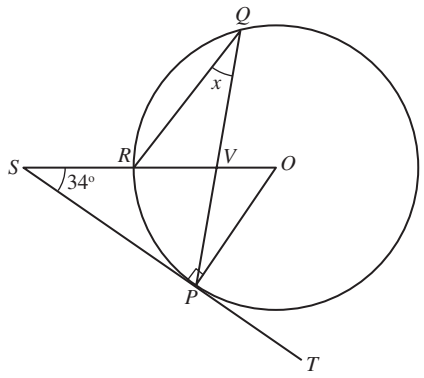
(c) $\tan \angle TNQ = \dfrac{QT}{NQ}$

$\tan 60° = \dfrac{QT}{20}$

$QT = 20 \times \tan 60°$

$= 34.64$ cm

23



$\angle POS = 90° - 34°$

$= 56°$

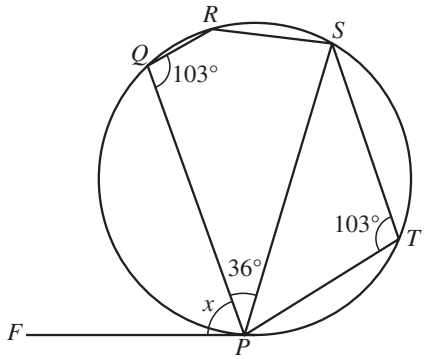
$\angle PQR = \dfrac{1}{2} \times \angle POS$

$x = \dfrac{1}{2} \times 56°$

$= 28°$

Jawapan/*Answer*: **C**

24



(a) $\angle FPS = \angle PTS$

$x + 36° = 103°$

$x = 67°$

(b) $\angle PSR = 180° - 103°$

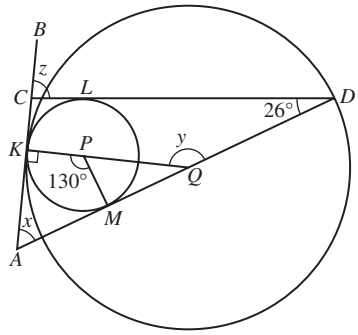
$= 77°$

$\angle FPS + \angle PSR = 103° + 77°$

$= 180°$

$\therefore$ FP adalah selari dengan RS/*FP is parallel to RS.*

25



$x + 130° = 180°$

$x = 50°$

$y = x + 90°$

$= 50° + 90°$

$= 140°$

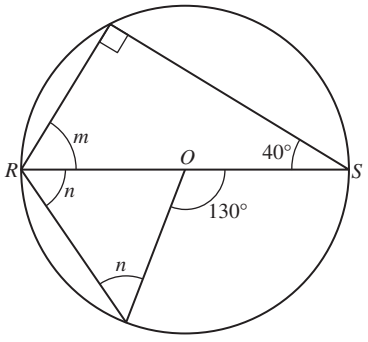
$z = x + 26°$

$= 50° + 26°$

$= 76°$

Praktis Sumatif

1



$m + 40° = 90°$

$m = 50°$

$n = \dfrac{1}{2} \times 130°$

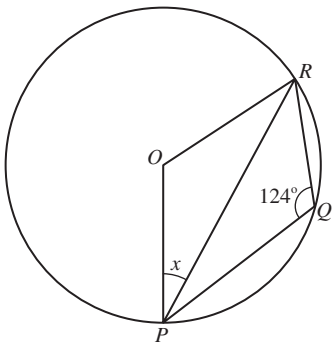
$= 65°$

$m + n = 50° + 65°$

$= 115°$

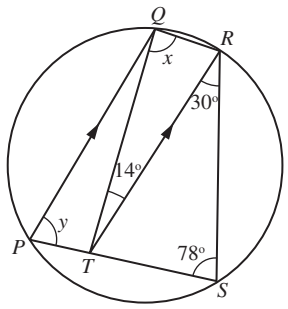
Jawapan/*Answer*: **B**

2



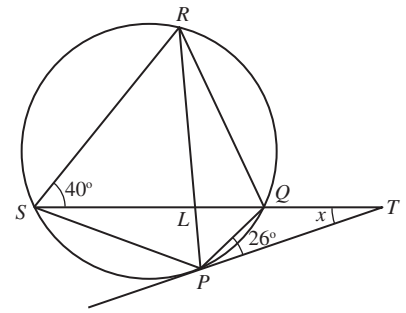
Sudut refleks *POR*/*Reflex angle POR*
$= 2 \times 124°$
$= 248°$
$\angle POR = 360° - 248°$
$= 112°$
$x = \frac{1}{2} \times (180° - 112°)$
$= 34°$
Jawapan/*Answer*: **D**

3



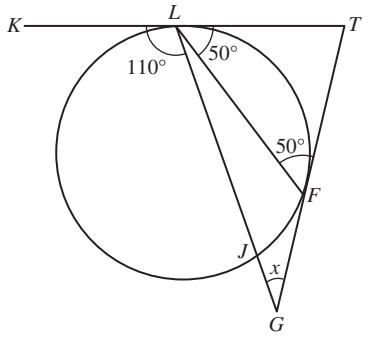
$\angle PQT = 14°$
$x + 14° + 78° = 180°$
$x + 92° = 180°$
$x = 88°$
$\angle QRT = 180° - 88° - 14°$
$= 78°$
$y + 78° + 30° = 180°$
$y + 108° = 180°$
$y = 72°$
Jawapan/*Answer*: **D**

4



$\angle PRQ = 26°$
$\angle QRS = \frac{1}{2} \times (180° - 40°)$
$= 70°$
$\angle PRS = 70° - 26°$
$= 44°$
$\angle PQS = 44°$
$x + 26° = 44°$
$x = 18°$
Jawapan/*Answer*: **B**

5



$\angle FLT = 50°$
$\angle FLG = 180° - 110° - 50°$
$= 20°$
$x + 20° = 50°$
$x = 30°$
Jawapan/*Answer*: **B**

6 (a) (i)

Sisi empat kitaran
Cyclic quadrilateral
ABCD

(ii) Sisi empat kitaran
Cyclic quadrilateral
BCDE

Hubungan antara sudut-sudut pada sisi empat kitaran
Relationship between angles of a cyclic quadrilateral

$\angle BAD + \angle BCD = 180°$
$\angle ABC + \angle ADC = 180°$

$\angle CBE + \angle CDE = 180°$
$\angle BCD + \angle BED = 180°$

(b) $x + 100° = 180°$

$x = 80°$

$(y + 20°) + 110° = 180°$

$y + 130° = 180°$

$y = 50°$

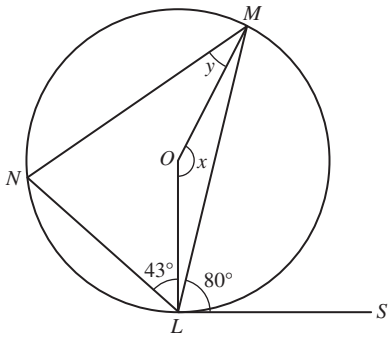
$\angle ADE = \angle ABE$

$z = 20°$

$w + 100° = 180°$

$w = 80°$

7



$\angle LNM = 80°$

$\angle LOM = 2 \times \angle LNM$

$x = 2 \times 80°$

$= 160°$

$\angle OLM = \angle OML$

$= 90° - 80°$

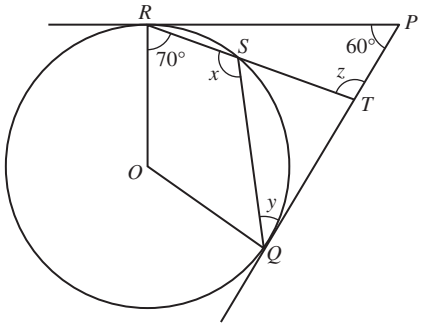
$= 10°$

$(y + 10°) + (43° + 10°) + 80° = 180°$

$y + 143° = 180°$

$y = 37°$

8



$\angle QOR = 180° - 60°$

$= 120°$

Sudut refleks QOR/*Reflex angle* QOR

$= 360° - 120°$

$= 240°$

$\angle QSR = \frac{1}{2} \times 240°$

$x = 120°$

$\angle OQS = 360° - 120° - 70° - 120°$

$= 50°$

$y = 90° - 50°$

$= 40°$

$\angle PRT = 90° - 70°$

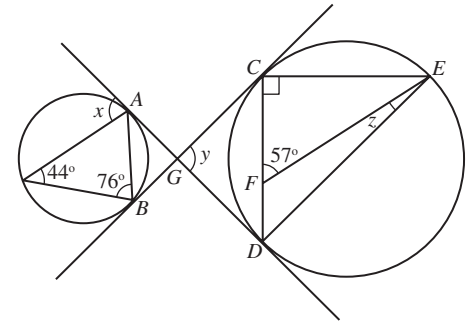
$= 20°$

$z + 20° + 60° = 180°$

$z + 80° = 180°$

$z = 100°$

9



$x = 76°$

$\angle BAG = \angle ABG = 44°$

$y = 180° - 44° - 44°$

$= 92°$

$\angle DCG = 44°$

$\angle CEF = 90° - 57°$

$= 33°$

$z + 33° = 44°$

$z = 11°$