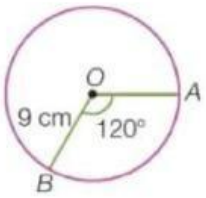
1. A square frame with sides of 22 cm is made of wire, and is transformed into a circle. Find the diameter, in cm, of the circle.
Sebuah rangka segi empat sama yang bersisi 22 cm *diperbuat daripada seutas wayar, diubah menjadi sebuah bulatan. Cari diameter, dalam* cm, *bulatan itu.*

[Use/*Guna* $\pi = \frac{22}{7}$]

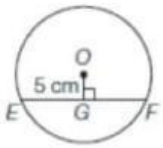
- A 14
- B 28
- C 30
- D 32

2. Find the area of the minor sector *AOB* in the following circle. [Use $\pi = 3.142$]
Cari luas sektor minor AOB bagi bulatan yang berikut. [*Guna* $\pi = 3.142$]



- A 74.112 cm^2
- B 76.588 cm^2
- C 80.246 cm^2
- D 84.834 cm^2

3. The diagram shows a circle with the centre *O*. *EGF* is a straight line of 24 cm long.
Rajah di bawah menunjukkan sebuah bulatan berpusat O. EGF ialah garis lurus dengan panjang 24 cm.



Given *OG* = 5 cm, find the radius of the circle.
Diberi OG = 5 cm, *cari jejari bulatan itu.*

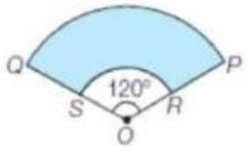
- A 13 cm
- B 11 cm
- C 8 cm
- D 7 cm

4. The diameter of a circle is 1.5 m. Find its circumference, in m.
Diameter sebuah bulatan ialah 1.5 m. *Cari lilitannya, dalam* m.
(Use/*Guna* $\pi = 3.142$)

- A 4.71
- B 9.42
- C 47.1
- D 94.2

LIVEWORKSHEETS

5. In the diagram, *R* and *S* are the midpoints of *OP* and *OQ* respectively.
Dalam rajah di bawah, R dan S masing-masing ialah titik tengah OP dan OQ.

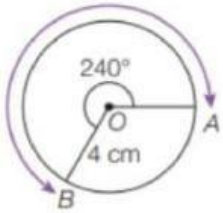


Given the radius, *OP*, is 14 cm. Calculate the area, in cm^2, of the shaded region.
Diberi bahawa jejari OP ialah 14 cm. *Hitung luas, dalam* cm^2, *kawasan berlorek.*

[Use/*Guna* $\pi = \frac{22}{7}$]

- **A** 77
- **B** 99
- **C** 121
- **D** 154

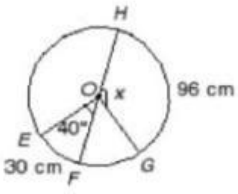
6. In the diagram, *O* is the centre of the circle.
Dalam rajah berikut, O ialah pusat bulatan.



Using $\pi = 3.142$, find the length of the major arc *AB*.
Dengan menggunakan $\pi = 3.142$, *cari panjang lengkok major AB.*

- **A** 16.7573 cm
- **B** 17.7574 cm
- **C** 18.573 cm
- **D** 19.773 cm

7.

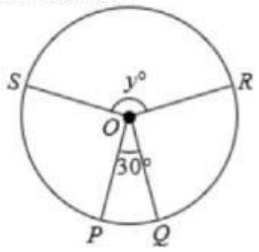


In the diagram, *O* is the centre of the circle. Find the value of *x*.
Dalam rajah di atas, O ialah pusat bagi sebuah bulatan. Cari nilai x.

- **A** 102°
- **B** 116°
- **C** 125°
- **D** 128°

LIVEWORKSHEETS

8. In the diagram, O is the centre of the circle.
Dalam rajah di bawah, O ialah pusat sebuah bulatan.



Given the lengths of the arcs PQ and RS are 20 cm and 98 cm respectively.
Find the value of y.
Diberi panjang lengkok PQ dan RS masing-masing ialah 20 cm *dan* 98 cm.
Cari nilai y.

- A 115
- B 124
- C 139
- D 147

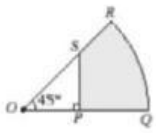
9. Find the area, in cm^2, of a sector of a circle with radius 21 cm, given that the angle at the centre is 40°.
Cari luas, dalam cm^2, *sektor bulatan dengan jejari* 21 cm, *diberi sudut pada pusat ialah* 40°.

- A 7.3
- B 38.5
- C 77
- D 154

10. A circle has a circumference of 176 cm. Find its radius, in cm.
Sebuah bulatan mempunyai lilitan 176 cm. *Cari jejarinya, dalam* cm.
$\left(\text{Use/Guna } \pi = \frac{22}{7}\right)$

- A 14
- B 21
- C 28
- D 35

11. The diagram shows a sector with centre.
Rajah di bawah menunjukkan sektor bulatan berpusat O.

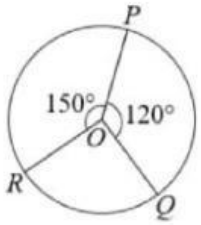


Given that OP = 3 cm and PQ = 5 cm, find the area, in cm^2, of the shaded part.
Diberi bahawa OP = 3 cm *dan PQ* = 5 cm, *cari luas, dalam* cm^2, *kawasan berlorek.*

- A $8\pi - \frac{9}{2}$
- B $8\pi - 9$
- C $2\pi - 9$
- D $2\pi - \frac{9}{2}$

LIVEWORKSHEETS

12. The diagram shows a circle with centre O.
Rajah di bawah menunjukkan sebuah bulatan yang berpusat O.



The length of arc PQ is 32 cm. Find the length, in cm, of arc RQ.
Panjang lengkok PQ ialah 32 cm. *Cari panjang, dalam* cm, *lengkok RQ.*

- A 24
- B 28
- C 30
- D 40

13. A coin has a circumference of 44 cm.
Calculate the area, in cm^2, of one of its circular faces.
Sekeping duit syiling mempunyai lilitan bulatan 44 cm.
Hitung luas, dalam cm^2, *satu daripada muka bulatan itu.*
[Use/*Guna* $\pi = \frac{22}{7}$]

- A 122
- B 124
- C 137
- D 154

14. A sector has a radius of 10 cm. The angle subtended at the centre of the sector is 36°.
Find the length, in cm, of the arc of the sector.
Sebuah sektor mempunyai jejari 10 cm. *Sudut yang dicangkum pada pusat sektor ialah* 36°.
Cari panjang, dalam cm, *lengkok sektor itu.*
[Use/*Guna* $\pi = \frac{22}{7}$]

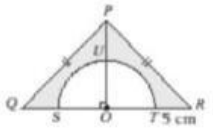
- A 3.14
- B 6.29
- C 31.4
- D 62.8

15. Find the area, in cm^2, of a circle with diameter of 28 cm.
Cari luas, dalam cm^2, *bagi sebuah bulatan berdiameter* 28 cm.
(Use/*Guna* $\pi = \frac{22}{7}$)

- A 239
- B 577
- C 616
- D 722

LIVEWORKSHEETS

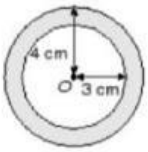
16. The diagram shows an isosceles triangle PQR and a semicircle with centre O.
Rajah di bawah menunjukkan sebuah segi tiga sama kaki PQR dan sebuah semibulatan pusat O.



Given that $PO = OR = 12$ cm. Find the area, in cm^2, of the shaded part.
Diberi bahawa PO = OR = 12 cm. Cari luas, dalam cm^2, bagi kawasan yang berlorek.
$\left[\text{Use/Guna } \pi = \frac{22}{7}\right]$

- A 149
- B 144
- C 77
- D 67

17.



The diagram shows two concentric circles with centre O. Find the area, in cm^2, of the shaded region.
Rajah di atas menunjukkan dua buah bulatan yang sepusat dengan pusat O. Cari luas, dalam cm^2, kawasan berlorek.
$\left(\text{Use/Guna } \pi = \frac{22}{7}\right)$

- A $3\frac{1}{7}$
- B $6\frac{2}{7}$
- C 11
- D 22

18. Find the area of a circle with the diameter of 4.5 m. (Use $\pi = 3.142$)
Cari luas bulatan berdiameter 4.5 m. (*Guna* $\pi = 3.142$)

- A $8.24\ m^2$
- B $12.16\ m^2$
- C $15.91\ m^2$
- D $23.06\ m^2$

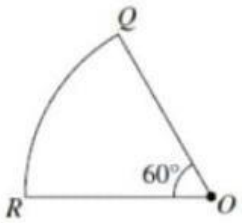
19. Calculate the circumference of a circle with the radius of 1.4 m. $\left(\text{Use } \pi = \frac{22}{7}\right)$

Hitung lilitan sebuah bulatan berjejari 1.4 m. $\left(\text{Guna } \pi = \frac{22}{7}\right)$

- A 2.5
- B 4.4
- C 6.6
- D 8.8

LIVEWORKSHEETS

20. The diagram shows the sector of a circle with the centre O.
Rajah di bawah menunjukkan sektor bagi sebuah bulatan berpusat O.



The length of arc QR is 22 cm. Calculate the perimeter, in cm, of the sector.
Panjang lengkok QR ialah 22 cm. *Hitung perimeter, dalam* cm, sektor itu.
(Use/*Guna* $\pi = \frac{22}{7}$)

- **A** 43
- **B** 46
- **C** 50
- **D** 64

LIVEWORKSHEETS