Acumen Teach
To the point
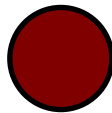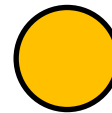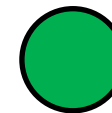
Circles Master-box

Circles—Logic—Mathematical knowledge application

Acumen Teach
To the point

Easy (12 Questions)	/12
Moderate(12 Questions)	/24
Difficult(12 Questions)	/36
Total Marks	**/72**

How did you do?

🕐 2 hours   ❓ 38 Questions

Easy Questions

1. What is the radius of a circle if its diameter is 10 cm?

   (1 marks)

2. Find the circumference of a circle with a radius of 4 cm.

   (1 marks)

3. If the radius of a circle is 7 cm, what is its diameter?

   (1 marks)

4. **Find the area of a circle with a radius of 3 cm.**

(1 marks)

5. **What is the radius of a circle with a circumference of 6πcm?**

(1 marks)

6. **If the diameter of a circle is 12 cm, find its radius.**

(1 marks)

7. **Calculate the circumference of a circle with a diameter of 8 cm.**

(1 marks)

8. **What is the area of a circle with a diameter of 10 cm?**

(1 marks)

9. **Find the radius of a circle with a circumference of 10π cm.**

<div align="right">(1 marks)</div>

10. **If the radius of a circle is 2.5 cm, what is its diameter?**

<div align="right">(1 marks)</div>

11. **Calculate the area of a circle with a radius of 6 cm.**

<div align="right">(1 marks)</div>

12. **What is the circumference of a circle with a radius of 9 cm?**

<div align="right">(1 marks)</div>

Moderate Questions

13. Find the length of the arc subtended by a central angle of 60° in a circle with a radius of 5 cm.

(2 marks)

14. Calculate the area of a sector with a central angle of 90° in a circle with a radius of 7 cm.

(2 marks)

15. Find the radius of a circle with an area of 64π cm^2

(2 marks)

16. What is the diameter of a circle with a circumference of 18π cm?

(2 marks)

17. Calculate the area of a circle with a diameter of 16 cm.

18. If a circle has a radius of 10 cm, find the length of an arc subtended by a central angle of 45°.

19. What is the area of a sector with a central angle of 120° in a circle with a radius of 4 cm?

20. Find the radius of a circle with a circumference of 24 cm.

21. Calculate the area of a circle with a circumference of 14π cm.

22. If the radius of a circle is 9 cm, find the length of an arc subtended by a central angle of 30°.

<div align="right">(2 marks)</div>

23. What is the area of a sector with a central angle of 270° in a circle with a radius of 6 cm?

<div align="right">(2 marks)</div>

24. Find the radius of a circle with an area of 81π cm^2.

<div align="right">(2 marks)</div>

Difficult Questions

25. Find the radius of a circle if the area of a sector with a central angle of 72° is 40π cm^2.

<div align="right">(3 marks)</div>

26. Calculate the area of a segment with a central angle of 60° in a circle with a radius of 8 cm.

<div align="right">(3 marks)</div>

27. Find the diameter of a circle if the area of a sector with a central angle of 45° is 25π cm^2.

<div align="right">(3 marks)</div>

28. Calculate the length of an arc subtended by a central angle of 150° in a circle with a radius of 12 cm.

(3 marks)

29. Find the area of a circle with a circumference of 50 cm.

30. Determine the radius of a circle if the length of an arc with a central angle of 120° is 20π cm.

(3 marks)

31. Calculate the area of a sector with a central angle of 240° in a circle with a radius of 6 cm.

(3 marks)

Acumen Teach
To the point

32. Find the length of an arc subtended by a central angle of 90° in a circle with a diameter of 20 cm.

<div align="right">(3 marks)</div>

33. Determine the area of a segment with a central angle of 120° in a circle with a radius of 5 cm.

<div align="right">(3 marks)</div>

34. Calculate the radius of a circle if the area of a sector with a central angle of 135° is 54π cm^2.

<div align="right">(3 marks)</div>

35. Find the length of an arc subtended by a central angle of 225° in a circle with a radius of 7 cm.

<div align="right">(3 marks)</div>

36. Determine the diameter of a circle if the area of a segment with a central angle of 150° and a height of 3 cm is $18\pi - 9\sqrt{3}$ cm^2.

<div align="right">(2 marks)</div>