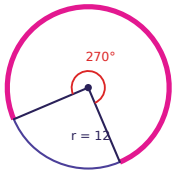
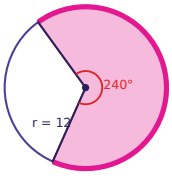
Task card 1 Arc Length & Area of a Sector

Find the length of the highlighted arc. Leave your answer in terms of π.



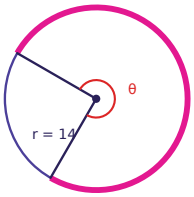
Task card 2 Arc Length & Area of a Sector

Find the area of the shaded sector. Leave your answer in terms of π.



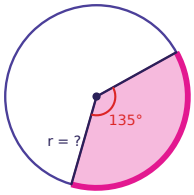
Task card 3 Arc Length & Area of a Sector

The highlighted arc has length 21π and the radius is 14. Find the central angle θ.



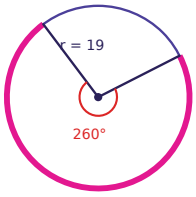
Task card 4 Arc Length & Area of a Sector

The shaded sector has area 96π and a central angle of 135°. Find the radius.



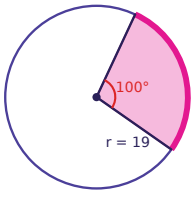
Task card 5 Arc Length & Area of a Sector

Find the length of the highlighted arc. Use π ≈ 3.14 and round to the nearest tenth.



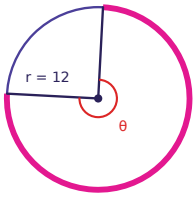
Task card 6 Arc Length & Area of a Sector

Find the area of the shaded sector. Use π ≈ 3.14 and round to the nearest tenth.



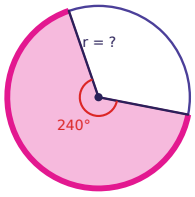
Task card 7 Arc Length & Area of a Sector

The highlighted arc has length 18π and the radius is 12. Find the central angle θ.



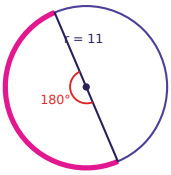
Task card 8 Arc Length & Area of a Sector

The shaded sector has area 24π and a central angle of 240°. Find the radius.



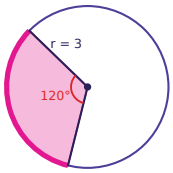
Task card 9 Arc Length & Area of a Sector

Find the length of the highlighted arc. Leave your answer in terms of π.



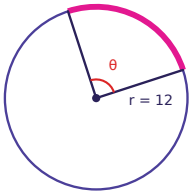
Task card 10 Arc Length & Area of a Sector

Find the area of the shaded sector. Leave your answer in terms of π.



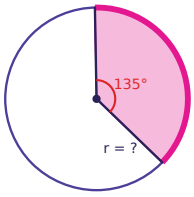
Task card 11 Arc Length & Area of a Sector

The highlighted arc has length 6π and the radius is 12. Find the central angle θ.



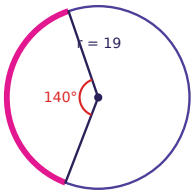
Task card 12 Arc Length & Area of a Sector

The shaded sector has area 54π and a central angle of 135°. Find the radius.



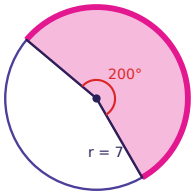
Task card 13 Arc Length & Area of a Sector

Find the length of the highlighted arc. Use π ≈ 3.14 and round to the nearest tenth.



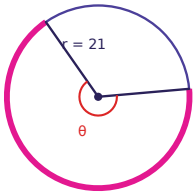
Task card 14 Arc Length & Area of a Sector

Find the area of the shaded sector. Use π ≈ 3.14 and round to the nearest tenth.



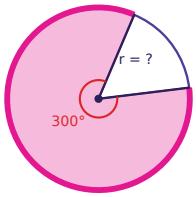
Task card 15 Arc Length & Area of a Sector

The highlighted arc has length 28π and the radius is 21. Find the central angle θ.



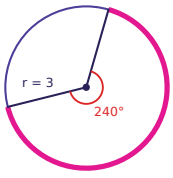
Task card 16 Arc Length & Area of a Sector

The shaded sector has area 270π and a central angle of 300°. Find the radius.



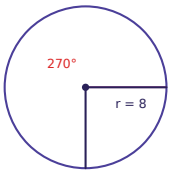
Task card 17 Arc Length & Area of a Sector

Find the length of the highlighted arc. Leave your answer in terms of π.



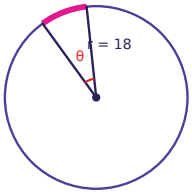
Task card 18 Arc Length & Area of a Sector

Find the area of the shaded sector. Leave your answer in terms of π.



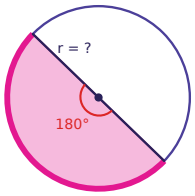
Task card 19 Arc Length & Area of a Sector

The highlighted arc has length 3π and the radius is 18. Find the central angle θ.



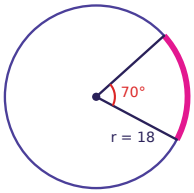
Task card 20 Arc Length & Area of a Sector

The shaded sector has area 200π and a central angle of 180°. Find the radius.



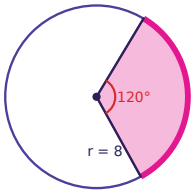
Task card 21 Arc Length & Area of a Sector

Find the length of the highlighted arc. Use π ≈ 3.14 and round to the nearest tenth.



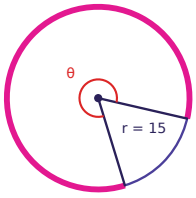
Task card 22 Arc Length & Area of a Sector

Find the area of the shaded sector. Use π ≈ 3.14 and round to the nearest tenth.



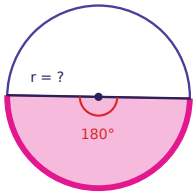
Task card 23 Arc Length & Area of a Sector

The highlighted arc has length 25π and the radius is 15. Find the central angle θ.



Task card 24 Arc Length & Area of a Sector

The shaded sector has area 18π and a central angle of 180°. Find the radius.



Arc Length & Area of a Sector Task Cards

Recording sheet · Grade 10 · Give answers in terms of π (like 6π) unless the problem says to use π ≈ 3.14; then round to the nearest tenth.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Arc Length & Area of a Sector Task Cards: Answer Key

Grade 10 · Hard

The answers online

1. 18π	**2.** 96π	**3.** 270°
4. 16	**5.** 86.2	**6.** 314.9
7. 270°	**8.** 6	**9.** 11π
10. 3π	**11.** 90°	**12.** 12
13. 46.4	**14.** 85.5	**15.** 240°
16. 18	**17.** 4π	**18.** 48π
19. 30°	**20.** 20	**21.** 22.0
22. 67.0	**23.** 300°	**24.** 6