Task card 1 Radians, Arc Length & Sector Area

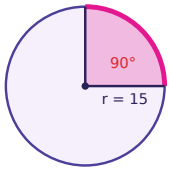
Convert 18° to radians: 18° = ___π

Task card 2 Radians, Arc Length & Sector Area

Convert 2π/5 radians to degrees.

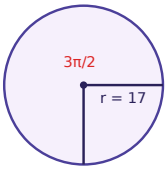
Task card 3 Radians, Arc Length & Sector Area

Find the length of the highlighted arc as a multiple of π: s = ___π



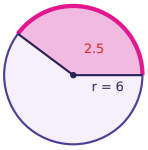
Task card 4 Radians, Arc Length & Sector Area

Find the area of the shaded sector as a multiple of π: A = ___π



Task card 5 Radians, Arc Length & Sector Area

A circle has radius 6 cm. Find the length of the arc cut off by a central angle of 2.5 radians.

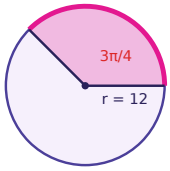


Task card 6 Radians, Arc Length & Sector Area

An arc of length $\left(\frac{27}{2}\right)\pi$ has a central angle of 3π/2 radians. Find the radius of the circle.

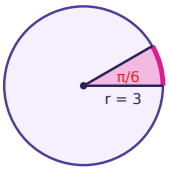
Task card 7 Radians, Arc Length & Sector Area

Find the length of the highlighted arc as a multiple of π: s = ___π



Task card 8 Radians, Arc Length & Sector Area

Find the area of the shaded sector as a multiple of π: A = ___π



Task card 9 Radians, Arc Length & Sector Area

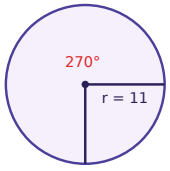
Convert 270° to radians: 270° = ___π

Task card 10 Radians, Arc Length & Sector Area

Convert π/3 radians to degrees.

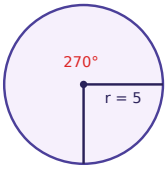
Task card 11 Radians, Arc Length & Sector Area

Find the length of the highlighted arc as a multiple of π: s = ___π



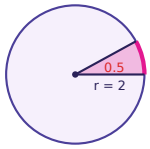
Task card 12 Radians, Arc Length & Sector Area

Find the area of the shaded sector as a multiple of π: A = ___π



Task card 13 Radians, Arc Length & Sector Area

A circle has radius 2 cm. Find the length of the arc cut off by a central angle of 0.5 radians.

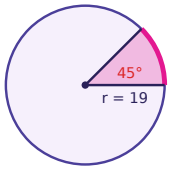


Task card 14 Radians, Arc Length & Sector Area

An arc of length 9π has a central angle of 3π/2 radians. Find the radius of the circle.

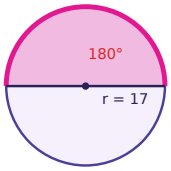
Task card 15 Radians, Arc Length & Sector Area

Find the length of the highlighted arc as a multiple of π: s = ___π



Task card 16 Radians, Arc Length & Sector Area

Find the area of the shaded sector as a multiple of π: A = ___π



Task card 17 Radians, Arc Length & Sector Area

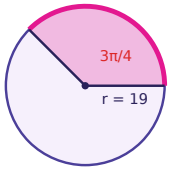
Convert 405° to radians: 405° = ___π

Task card 18 Radians, Arc Length & Sector Area

Convert 2π/3 radians to degrees.

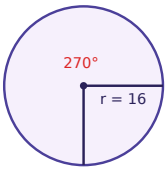
Task card 19 Radians, Arc Length & Sector Area

Find the length of the highlighted arc as a multiple of π: s = ___π



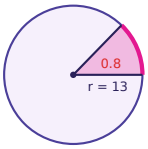
Task card 20 Radians, Arc Length & Sector Area

Find the area of the shaded sector as a multiple of π: A = ___π



Task card 21 Radians, Arc Length & Sector Area

A circle has radius 13 cm. Find the length of the arc cut off by a central angle of 0.8 radians.

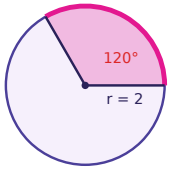


Task card 22 Radians, Arc Length & Sector Area

An arc of length $\left(\frac{20}{3}\right)\pi$ has a central angle of π/3 radians. Find the radius of the circle.

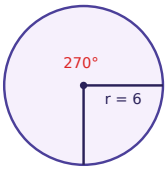
Task card 23 Radians, Arc Length & Sector Area

Find the length of the highlighted arc as a multiple of π: s = ___π



Task card 24 Radians, Arc Length & Sector Area

Find the area of the shaded sector as a multiple of π: A = ___π



Radians, Arc Length & Sector Area Task Cards

Recording sheet · Grade 11 · Answer each question. When asked for a multiple of π, type only the number in front of π (for example 5/6).

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

Radians, Arc Length & Sector Area Task Cards: Answer Key

Grade 11 · Hard

The answers online

1. $\frac{1}{10}$	**2.** 72	**3.** $\frac{15}{2}$
4. $\frac{867}{4}$	**5.** 15	**6.** 9
7. 9	**8.** $\frac{3}{4}$	**9.** $\frac{3}{2}$
10. 60	**11.** $\frac{33}{2}$	**12.** $\frac{75}{4}$
13. 1	**14.** 6	**15.** $\frac{19}{4}$
16. $\frac{289}{2}$	**17.** $\frac{9}{4}$	**18.** 120
19. $\frac{57}{4}$	**20.** 192	**21.** 10.4
22. 20	**23.** $\frac{4}{3}$	**24.** 27