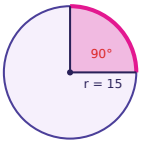
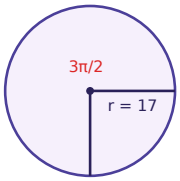
Convert 18° to radians: 18° = ___π

Convert 2π/5 radians to degrees.

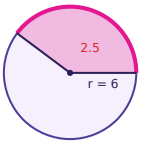
Find the length of the highlighted arc as a multiple of π: s = ___π



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

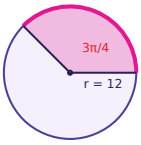


A circle has radius 6 cm. Find the length of the arc cut off by a central angle of 2.5 radians.

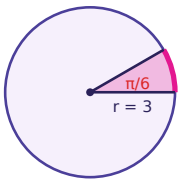


An arc of length $\left(\frac{27}{2}\right)\pi$ has a central angle of 3π/2 radians. Find the radius of the circle.

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



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



Radians, Arc Length & Sector Area · 2

ANSWER

72

Radians, Arc Length & Sector Area · 1

ANSWER

$\frac{1}{10}$

Radians, Arc Length & Sector Area · 4

ANSWER

$\frac{867}{4}$

Radians, Arc Length & Sector Area · 3

ANSWER

$\frac{15}{2}$

Radians, Arc Length & Sector Area · 6

ANSWER

9

Radians, Arc Length & Sector Area · 5

ANSWER

15

Radians, Arc Length & Sector Area · 8

ANSWER

$\frac{3}{4}$

Radians, Arc Length & Sector Area · 7

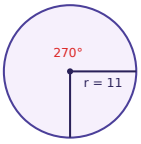
ANSWER

9

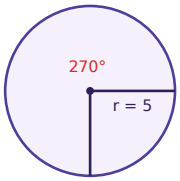
Convert 270° to radians: 270° = ___π

Convert π/3 radians to degrees.

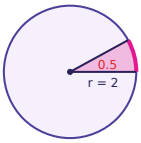
Find the length of the highlighted arc as a multiple of π: s = ___π



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

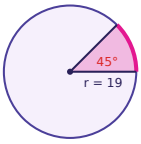


A circle has radius 2 cm. Find the length of the arc cut off by a central angle of 0.5 radians.

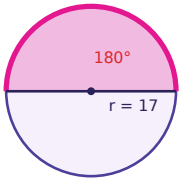


An arc of length 9π has a central angle of 3π/2 radians. Find the radius of the circle.

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



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



Radians, Arc Length & Sector Area · 10

ANSWER

60

Radians, Arc Length & Sector Area · 9

ANSWER

$\frac{3}{2}$

Radians, Arc Length & Sector Area · 12

ANSWER

$\frac{75}{4}$

Radians, Arc Length & Sector Area · 11

ANSWER

$\frac{33}{2}$

Radians, Arc Length & Sector Area · 14

ANSWER

6

Radians, Arc Length & Sector Area · 13

ANSWER

1

Radians, Arc Length & Sector Area · 16

ANSWER

$\frac{289}{2}$

Radians, Arc Length & Sector Area · 15

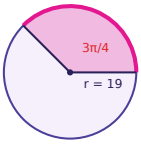
ANSWER

$\frac{19}{4}$

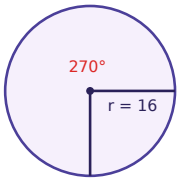
Convert 405° to radians: 405° = ___π

Convert 2π/3 radians to degrees.

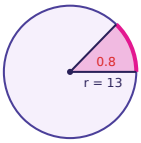
Find the length of the highlighted arc as a multiple of π: s = ___π



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

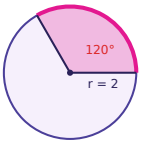


A circle has radius 13 cm. Find the length of the arc cut off by a central angle of 0.8 radians.

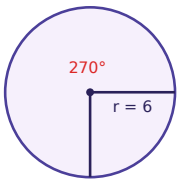


An arc of length $\frac{20}{3}\pi$ has a central angle of π/3 radians. Find the radius of the circle.

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



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



Radians, Arc Length & Sector Area · 18

ANSWER

120

Radians, Arc Length & Sector Area · 17

ANSWER

$\frac{9}{4}$

Radians, Arc Length & Sector Area · 20

ANSWER

192

Radians, Arc Length & Sector Area · 19

ANSWER

$\frac{57}{4}$

Radians, Arc Length & Sector Area · 22

ANSWER

20

Radians, Arc Length & Sector Area · 21

ANSWER

10.4

Radians, Arc Length & Sector Area · 24

ANSWER

27

Radians, Arc Length & Sector Area · 23

ANSWER

$\frac{4}{3}$