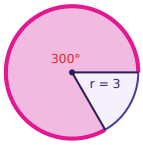
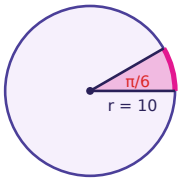
Convert 135° to radians: 135° = ___π

Convert 11π/6 radians to degrees.

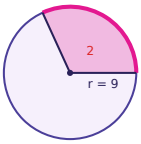
Find the length of the highlighted arc as a multiple of π: s = ___π



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

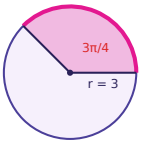


A circle has radius 9 cm. Find the length of the arc cut off by a central angle of 2 radians.

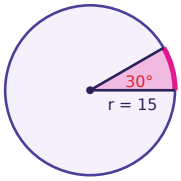


An arc of length $\left(\frac{3}{2}\right)\pi$ has a central angle of 3π/4 radians. Find the radius of the circle.

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

330

Radians, Arc Length & Sector Area · 1

ANSWER

$\frac{3}{4}$

Radians, Arc Length & Sector Area · 4

ANSWER

$\frac{25}{3}$

Radians, Arc Length & Sector Area · 3

ANSWER

5

Radians, Arc Length & Sector Area · 6

ANSWER

2

Radians, Arc Length & Sector Area · 5

ANSWER

18

Radians, Arc Length & Sector Area · 8

ANSWER

$\frac{75}{4}$

Radians, Arc Length & Sector Area · 7

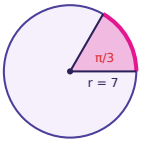
ANSWER

$\frac{9}{4}$

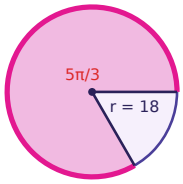
Convert 36° to radians: 36° = ___π

Convert 2π/3 radians to degrees.

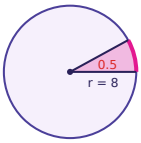
Find the length of the highlighted arc as a multiple of π: s = ___π



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

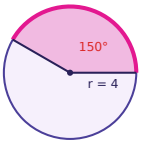


A circle has radius 8 cm. Find the length of the arc cut off by a central angle of 0.5 radians.

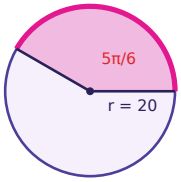


An arc of length $\frac{7}{2}\pi$ has a central angle of π/4 radians. Find the radius of the circle.

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

120

Radians, Arc Length & Sector Area · 9

ANSWER

$\frac{1}{5}$

Radians, Arc Length & Sector Area · 12

ANSWER

270

Radians, Arc Length & Sector Area · 11

ANSWER

$\frac{7}{3}$

Radians, Arc Length & Sector Area · 14

ANSWER

14

Radians, Arc Length & Sector Area · 13

ANSWER

4

Radians, Arc Length & Sector Area · 16

ANSWER

$\frac{500}{3}$

Radians, Arc Length & Sector Area · 15

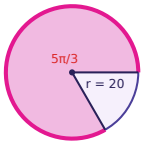
ANSWER

$\frac{10}{3}$

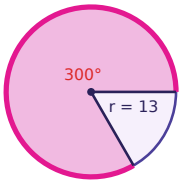
Convert 20° to radians: 20° = ___π

Convert 3π/2 radians to degrees.

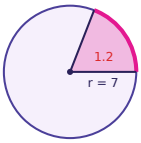
Find the length of the highlighted arc as a multiple of π: s = ___π



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

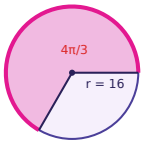


A circle has radius 7 cm. Find the length of the arc cut off by a central angle of 1.2 radians.

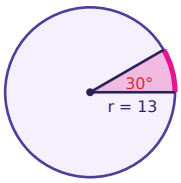


An arc of length $\frac{10}{3}\pi$ has a central angle of 5π/3 radians. Find the radius of the circle.

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

270

Radians, Arc Length & Sector Area · 17

ANSWER

$\frac{1}{9}$

Radians, Arc Length & Sector Area · 20

ANSWER

$\frac{845}{6}$

Radians, Arc Length & Sector Area · 19

ANSWER

$\frac{100}{3}$

Radians, Arc Length & Sector Area · 22

ANSWER

2

Radians, Arc Length & Sector Area · 21

ANSWER

8.4

Radians, Arc Length & Sector Area · 24

ANSWER

$\frac{169}{12}$

Radians, Arc Length & Sector Area · 23

ANSWER

$\frac{64}{3}$