



Area of a Circle Sector From Arc Length to Area (Equation)



| Find the area (in terms of π) of the green shaded sector with an arc length of 3/4 pi in the circle with radius 3 | $\frac{17}{8}\pi$ $\frac{5}{8}\pi$ | $\frac{3}{8}\pi$ $\frac{9}{8}\pi$ | $\frac{^{\circ}}{2}\pi$ | Find the area (in terms of π) of the green shaded sector with an arc length of 2 pi in the circle with radius 5 | $\frac{5\pi}{5\pi}$ | $\frac{3\pi}{5}$ | $\frac{23}{5}\pi$ |
|--|---|-----------------------------------|------------------------------------|--|---|-----------------------------------|------------------------------------|
| Find the area (in terms of π) of the green shaded sector with an arc length of 10/3 pi in the circle with radius 5 | $\frac{19}{3}\pi$ | $\frac{23}{3}\pi$ | $\frac{\overset{\circ}{13}}{3}\pi$ | Find the area (in terms of π) of the green shaded sector with an arc length of 4 pi in the circle with radius 6 | $egin{array}{c}^{\scriptscriptstyle{\wedge}} \ 17\pi \end{array}$ | 4π | 12π |
| 10/3 pi | $\frac{25}{3}\pi$ | | | r=6 4 pi | $egin{array}{c} ^{	extsf{	iny D}} & 11\pi \end{array}$ | 10π | |
| Find the area (in terms of π) of the green shaded sector with an arc length of 2 pi in the circle with radius 6 | $\frac{\stackrel{\scriptscriptstyle \wedge}{19}}{2}\pi$ | 7π | $\overset{\circ}{6}\pi$ | Find the area (in terms of π) of the green shaded sector with an arc length of 2/3 pi in the circle with radius 3 | $rac{\hat{10}}{9}\pi$ | $rac{11}{9}\pi$ | $\frac{\overset{\circ}{13}}{9}\pi$ |
| r=6 | ${5}\pi$ | $\frac{15}{2}\pi$ | | r=3 | $^{	ilda{	ilda{1}}}\pi$ | $7 - \pi$ | |
| | | 2 | | | | 9" | |
| Find the area (in terms of π) of the green shaded sector with an arc length of 4/3 pi in the circle with radius 2 | $^{^{\scriptscriptstyle{A}}}1\pi$ | $\frac{2}{3}\pi$ | $\frac{\overset{\circ}{13}}{3}\pi$ | Find the area (in terms of π) of the green shaded sector with an arc length of 4/5 pi in the circle with radius 2 | $\frac{11}{5}\pi$ | $\frac{9}{7}$ $\frac{7}{5}$ π | $rac{^{^{\mathrm{c}}}\!4}{5}\pi$ |