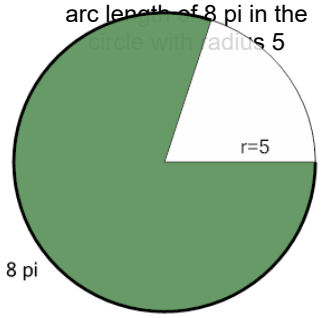
Name

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

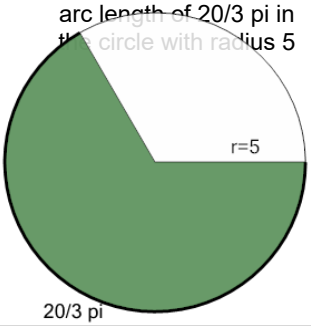
1 Find the area (in terms of π) of the green shaded sector with an arc length of 8 pi in the circle with radius 5



A 6π B 32π C 12π

D 10π E 20π

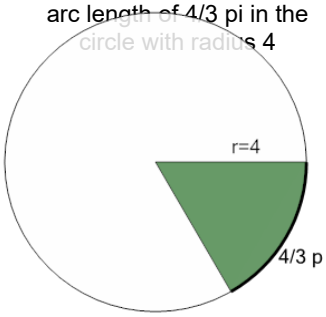
2 Find the area (in terms of π) of the green shaded sector with an arc length of 20/3 pi in the circle with radius 5



A $\frac{20}{3}\pi$ B 25π C 15π

D $\frac{50}{3}\pi$ E $\frac{40}{3}\pi$

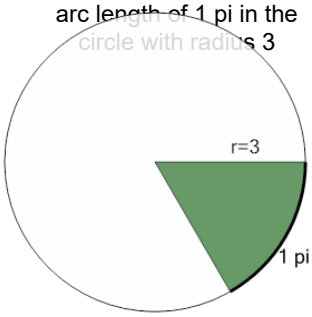
3 Find the area (in terms of π) of the green shaded sector with an arc length of 4/3 pi in the circle with radius 4



A $\frac{3}{2}\pi$ B 1π C $\frac{8}{3}\pi$

D $\frac{19}{6}\pi$ E 3π

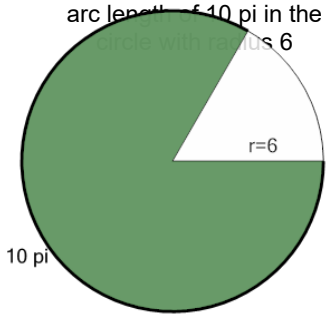
4 Find the area (in terms of π) of the green shaded sector with an arc length of 1 pi in the circle with radius 3



A $\frac{7}{3}\pi$ B $\frac{13}{6}\pi$ C $\frac{5}{3}\pi$

D $\frac{8}{3}\pi$ E $\frac{3}{2}\pi$

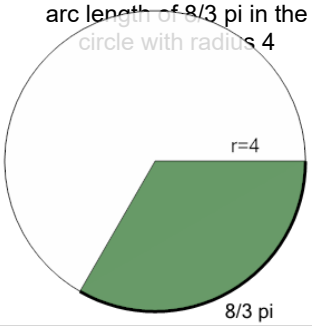
5 Find the area (in terms of π) of the green shaded sector with an arc length of 10 pi in the circle with radius 6



A 33π B 12π C 57π

D 30π E 21π

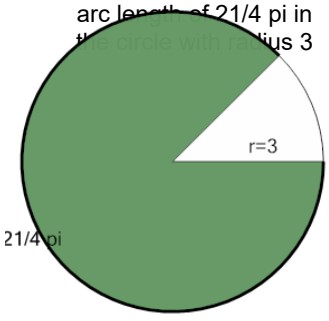
6 Find the area (in terms of π) of the green shaded sector with an arc length of 8/3 pi in the circle with radius 4



A $\frac{7}{3}\pi$ B $\frac{1}{3}\pi$ C $\frac{5}{6}\pi$

D $\frac{35}{6}\pi$ E $\frac{16}{3}\pi$

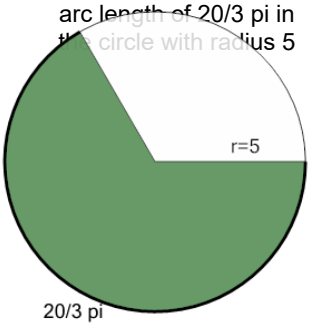
7 Find the area (in terms of π) of the green shaded sector with an arc length of 21/4 pi in the circle with radius 3



A $\frac{117}{8}\pi$ B $\frac{99}{8}\pi$ C $\frac{105}{8}\pi$

D $\frac{93}{8}\pi$ E $\frac{63}{8}\pi$

8 Find the area (in terms of π) of the green shaded sector with an arc length of 20/3 pi in the circle with radius 5



A $\frac{35}{3}\pi$ B 25π C $\frac{65}{3}\pi$

D 30π E $\frac{50}{3}\pi$