Circles Memory aid

Parts of a Circle

$d = 2r$

$r = \frac{d}{2}$

$2r = d$

$C = \pi d$ or $C = 2\pi r$

Area of a circle/disc $A = \pi r^2$

arc = a piece of the circumference (like crust of a pizza)

sector = part of area (like a slice of pizza)

$\pi = 3.14$

Circumference – Perimeter:

1- Find Circumference Given diameter

$d = 15$ cm
$r = 7.5$ cm
$\pi = 3.14$
$C = ?$

$C = \pi d$
$= \pi \cdot 15$
$= 3.14 \cdot 15$
$= 47.1$ cm

2- Find diameter given Circumference

$C = 37.68$
$\pi = 3.14$
$d = ?$

$C = \pi d$
$\frac{37.68}{3.14} = \frac{3.14 \cdot d}{3.14}$
12 cm $= d$

* if asked radius divide diameter by 2
so $r = 12 \div 2 = 6$

Area:

1- Find Area given radius

$A = ?$
$\pi = 3.14$
$r = 6$

$A = \pi r^2$
$= 3.14 \cdot 6^2$
$= 3.14 \cdot 36$
$= 113.04$ cm^2

* $6^2 = 6 \cdot 6$

squared for units for area

2- Find radius given area

$A = 200.96$
$\pi = 3.14$
$r = ?$

$A = \pi r^2$
$\frac{200.96}{3.14} = \frac{3.14 \cdot r^2}{3.14}$
$64 = r^2$
$\sqrt{64} = r$
8 cm $= r$

* $\sqrt{x}$ and x^2 are opposites.