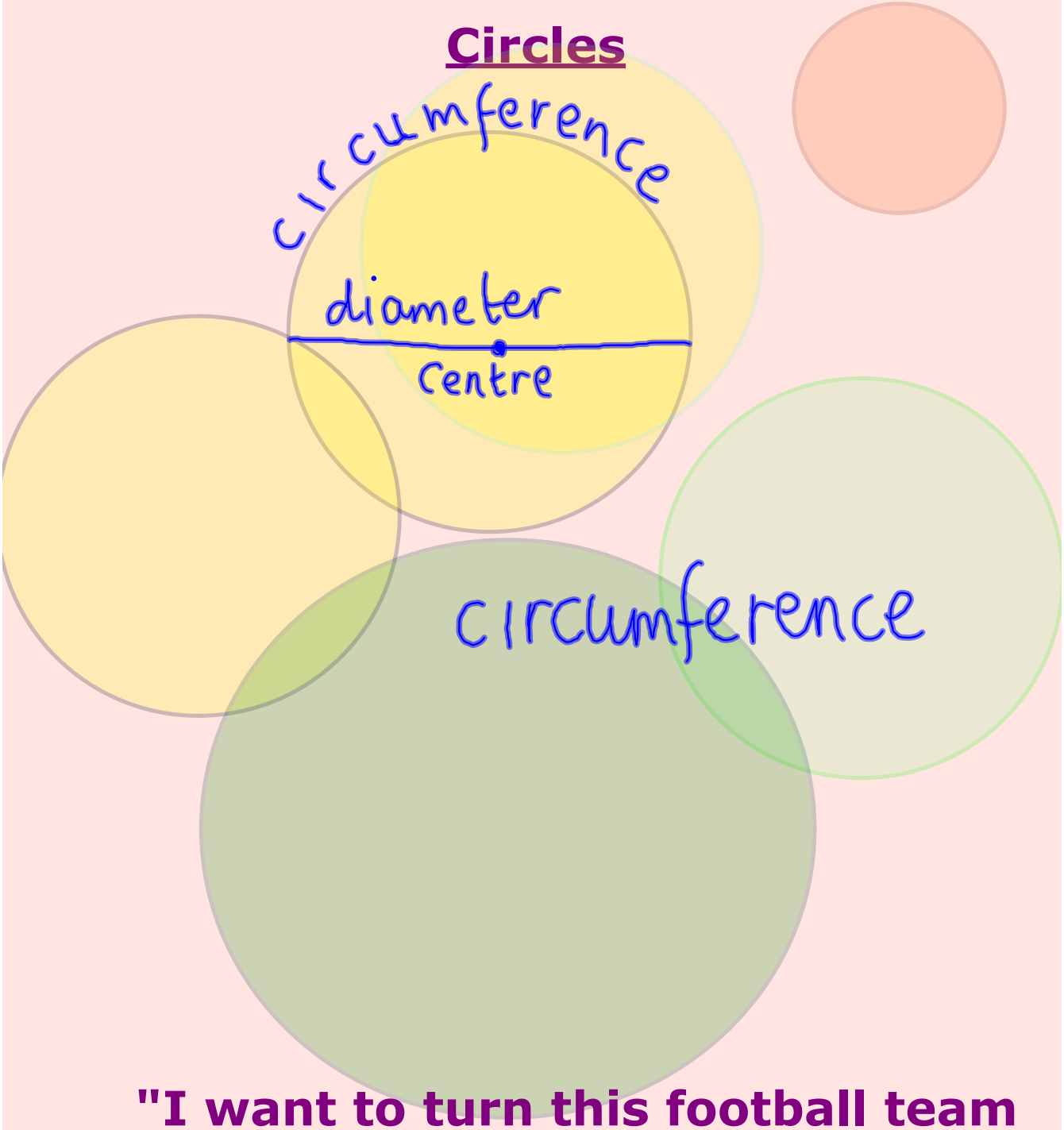
Circles



"I want to turn this football team around 360^0!"

Beating the odds: the hidden mathematics of sport

The Circumference

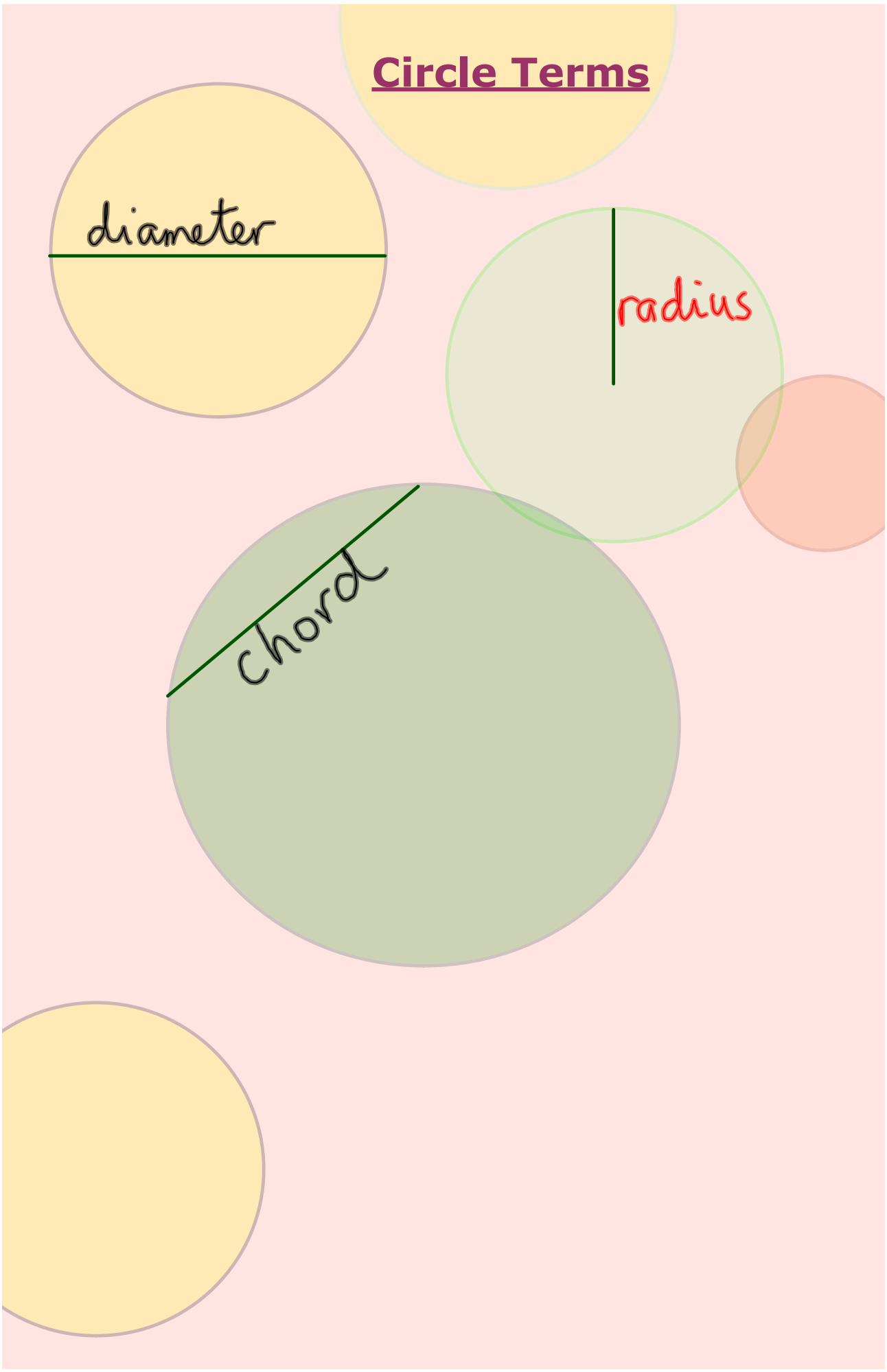
We are going to try and find a rule linking the length of the diameter with the circumference.

Make a table like this:

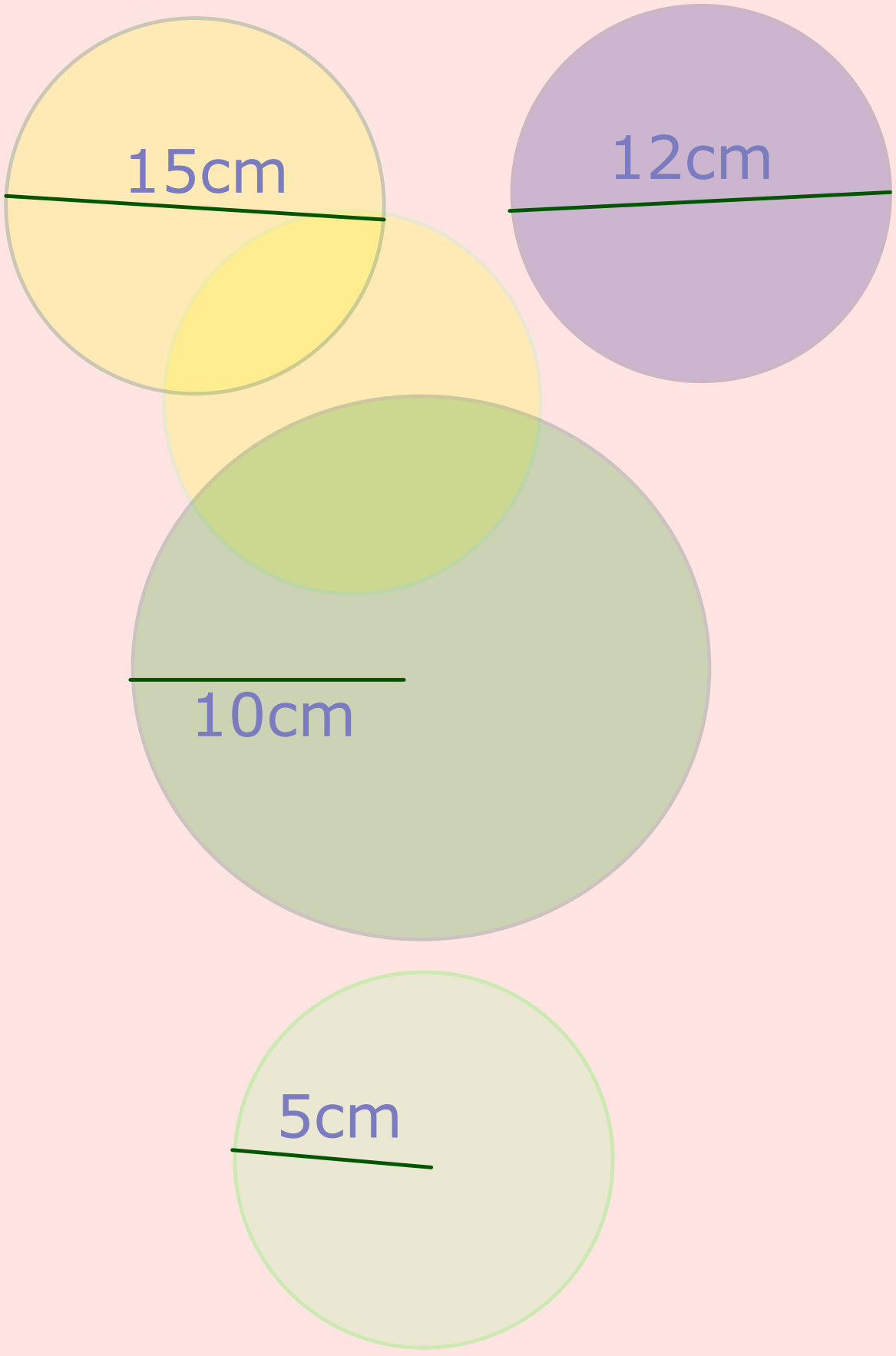
item	diameter	circumference
mat	20cm	68cm
cup	8cm	24cm ✓
basket	16cm	48cm ✓
blue bowl	14½cm	43cm

circumference = 3x diameter

Circle Terms

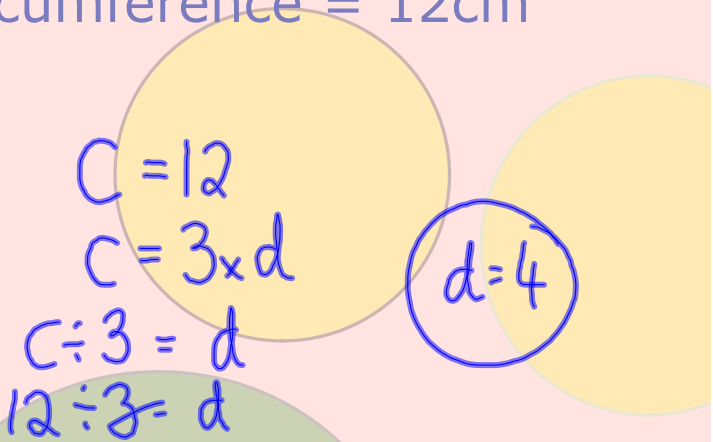


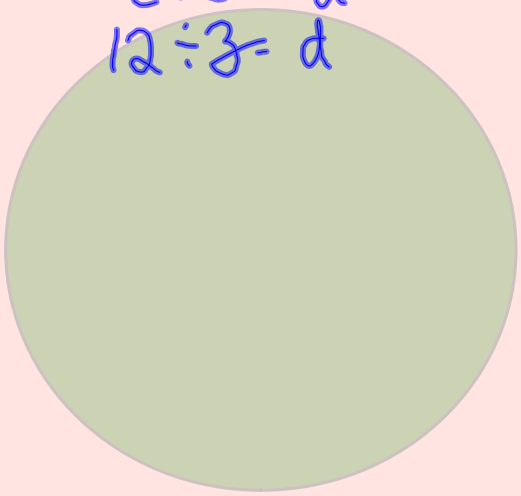
Circumference of Circles



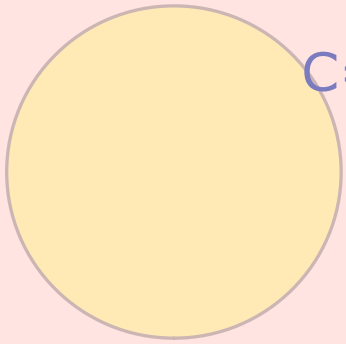
Finding the diameter.

Circumference = 12cm





C= 30cm



C= 15cm

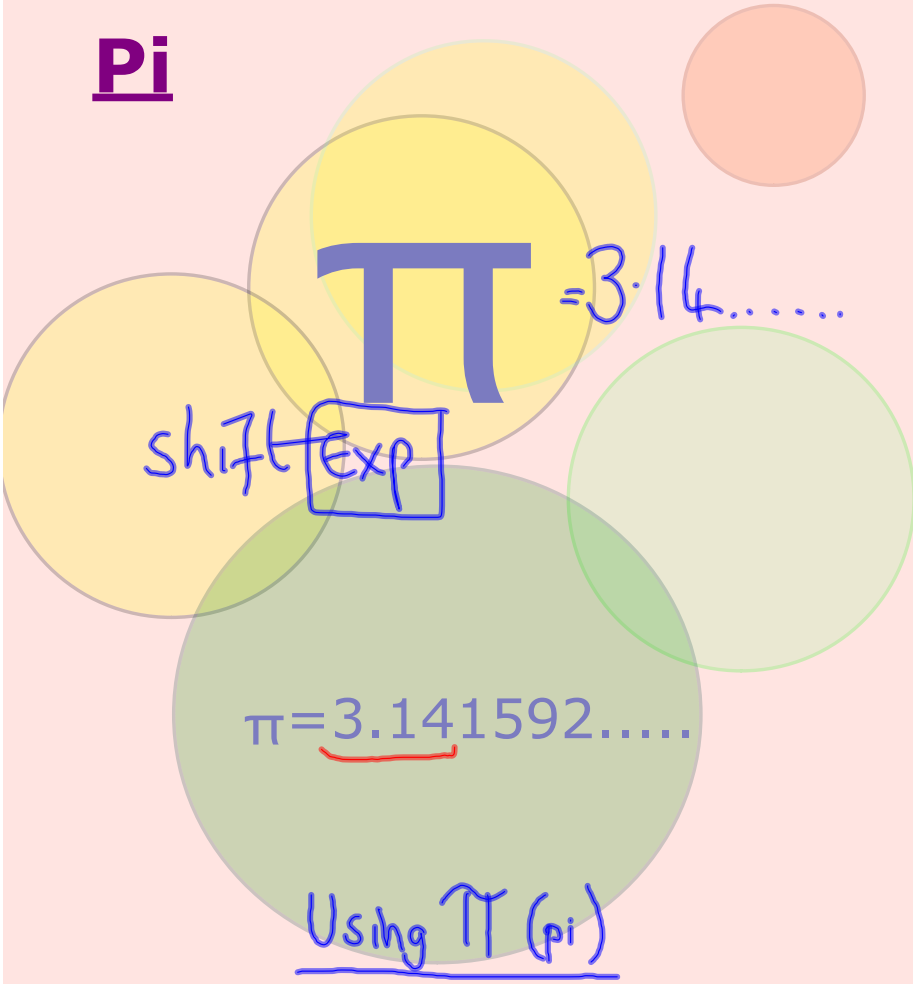
C= 33cm
Find the radius.

C= 12cm
Find the radius.

Find the circumference of circles with

1) diameter 10cm
2) Diameter = 4cm
3) diameter = 7cm
4) radius = 11cm
5) radius = 2cm

Pi



Use the π key on your calculator to work out the circumference of these circles:

1) diameter = 9cm

$C = \pi \times d$

$C = \pi \times 9$

$C = 28.27cm$

2) diameter = 13cm C = 40.84cm

3) diameter = 4m C = 13cm

4) radius = 4 cm C = 25.13cm

d = 8cm

page 200

201 D4

"I want to turn this football team around 360⁰!"