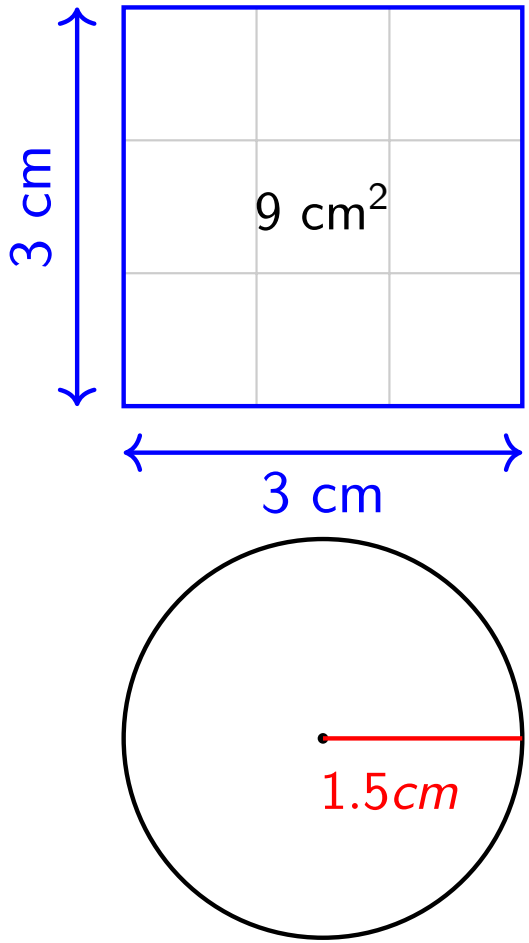
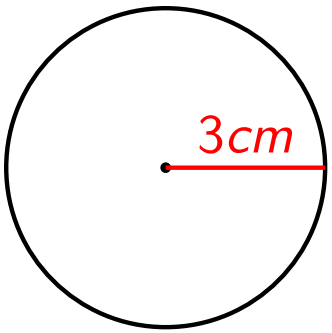
# Circles: Area, Squaring & Pi

# Starter

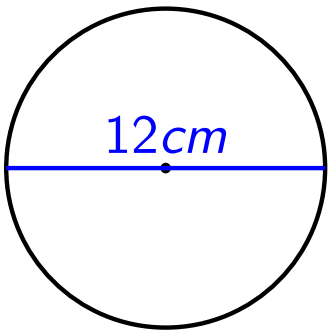



1. $4 \times 4 = ?$
2. $7 \times 7 = ?$
3. $10^2 = ?$
4. $3^2 = ?$
5. $2 \times 6$ and $6^2$ — are these the same?
6. $3.14 \times 9 =$
7. $3.14 \times 25 =$
7. A circle has **diameter** 14 cm. Find:
   (a) the radius
   (b) the circumference. ($\pi \approx 3.14$)
8. A circle has **radius** 5 cm. What is the circumference?
9. The square has side 3 cm and area 9 cm$^2$. A circle has radius 1.5 cm. Is the circle's area more or less than 9 cm$^2$?

# Starter



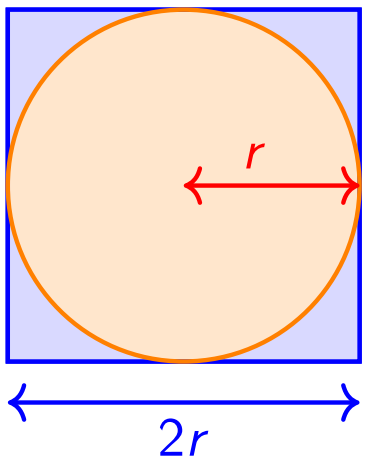

Circle A




Circle B

1. Halve 12 cm
2. Halve 9.4 cm
3. $6^2 = ?$
4. $1.5^2 = ?$
5. $3 \times 4^2 =$
6. True or false?
   $\pi \times (2r) = 2 \times \pi \times r$
7. Consider circle A
   (a) What is the circumference?
   (b) What is the area?
8. Consider circle B
   (a) What is the circumference?
   (b) What is the area?
9. Is the ratio of the cirumferences of circle's A and B the same as the ratio of the areas?

# Starter




1. $5 \times 5 = ?$
2. $8^2 = ?$
3. $2.5^2 = ?$
4. $3.14 \times 9 = ?$
5. Area of a 7 cm $\times$ 4 cm rectangle $= ?$
6. What fraction of $360^\circ$ is $90^\circ$?
7. Write an expression for the area of the circle in the picture
8. Write an expression for the area of the shaded blue region in the picture
9. If the square has a perimeter of 48cm, what is the area of the shaded blue region?