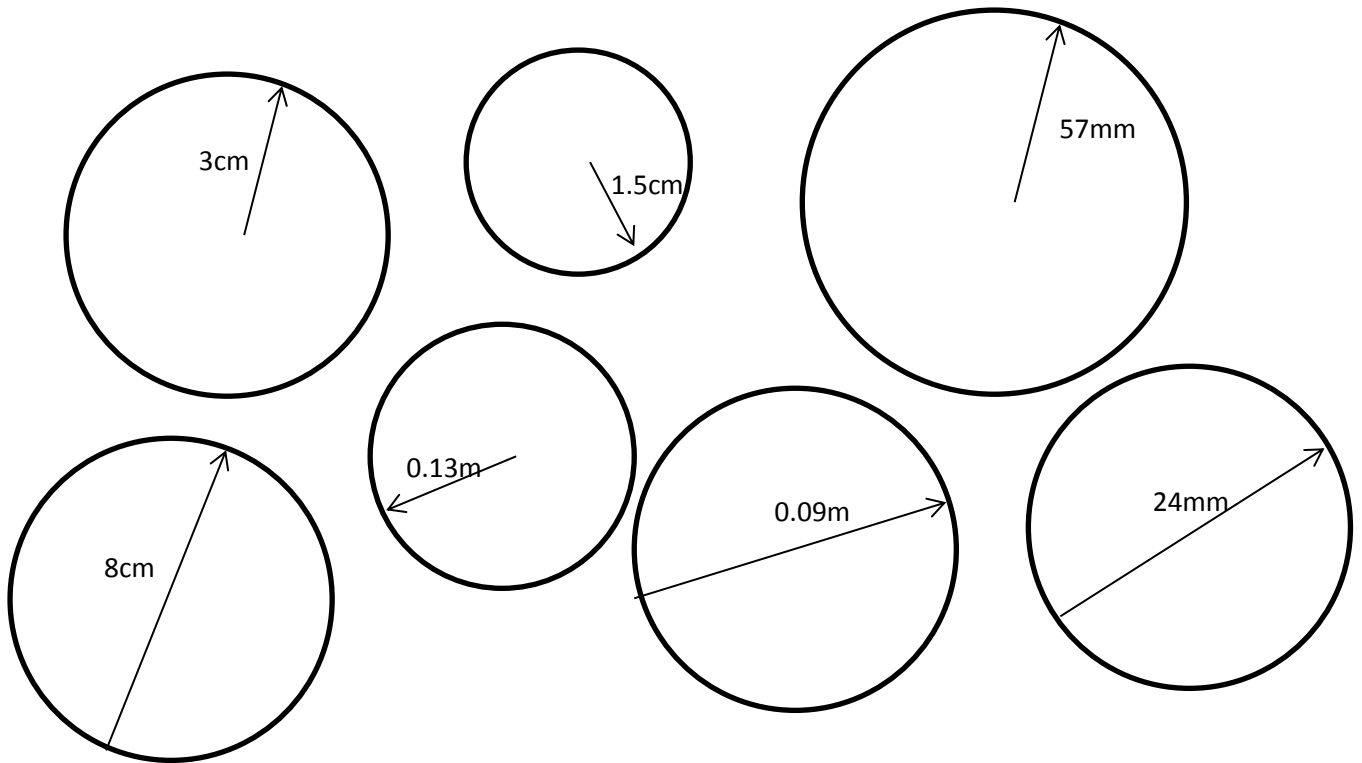


Circumference of Circles

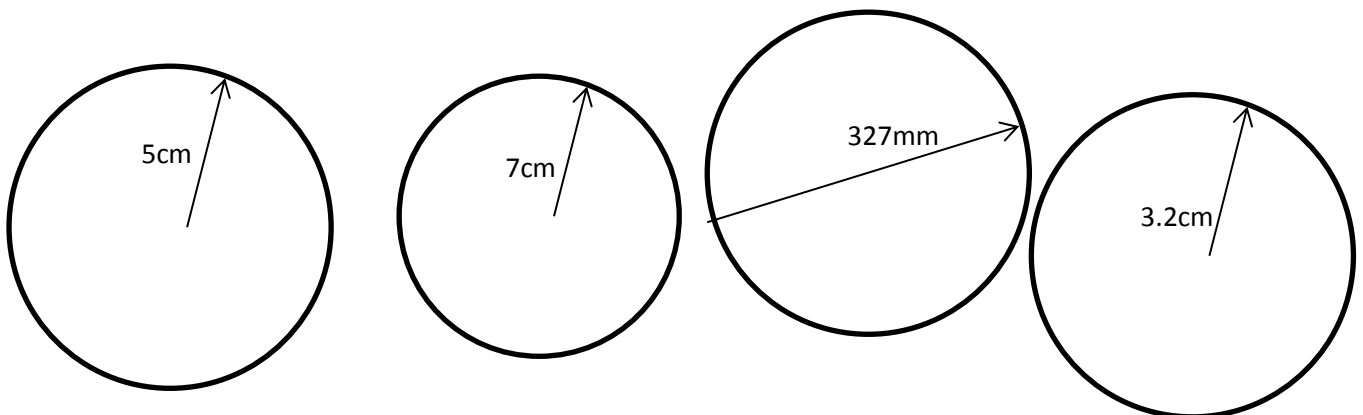
Part 1) Find the circumference of the following circles in cm using a calculator



Part 2)

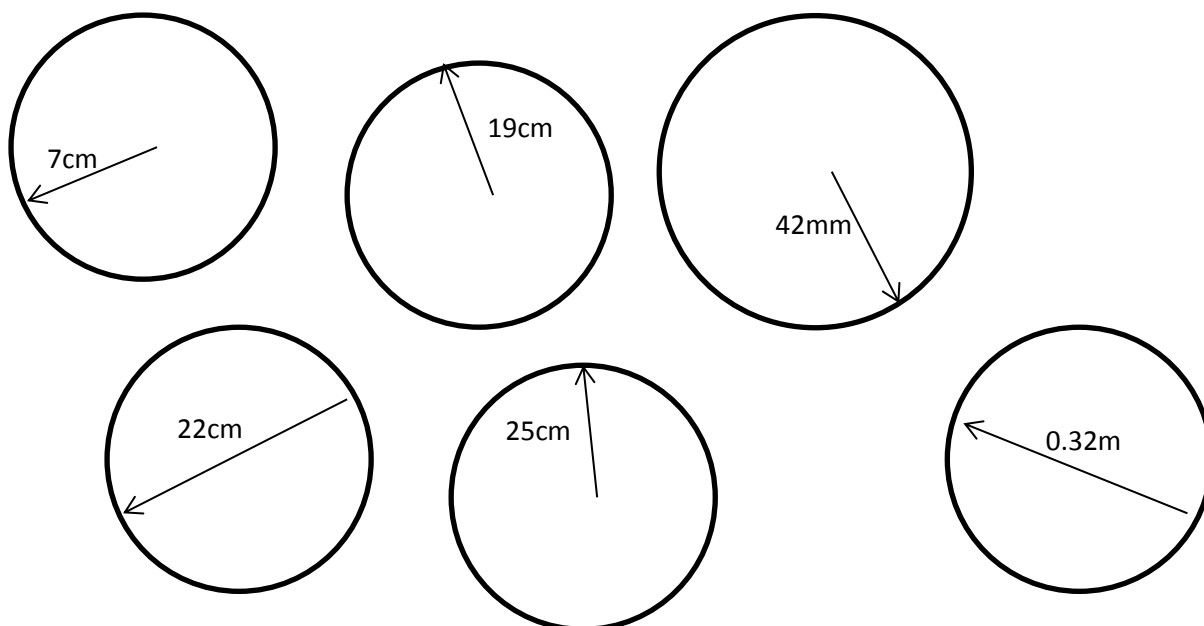
- A bike wheel has a radius of 1.3m. How many spins would it do over a distance of 3km?
- It costs £3 to produce 1cm of gold wire. How much would it cost to produce 120 gold rings out of the wire, each with a radius of 1.2cm?
- Tim the ant walks at 1.32 per second. How long would it take him to walk around a circular pool with a diameter of 10m?

Part 3) Find the circumference of the following circles in cm without using a calculator and taking $\pi = 3.14$



Area of circles

Part 1) Find the area of the following circles in cm^2 with a calculator



Part 2) Solve these problems

- One circular shaped piece of pastry has a radius of 7cm. How much pastry would we need in total to make 18 pastry shapes
- It costs £15.20 per cm^2 to coat metal in gold plating. How much would it cost in total to coat 15 circular pieces of metal each with a radius of 4cm?
- What is the area of a semi-circle with a radius of 9cm?

Part 3) Find the area of the following circles in cm^2 without a calculator, taking $\pi = 3.14$

$r = 10\text{cm}$	$r = 5\text{cm}$	$r = 3\text{cm}$	$d = 8\text{cm}$
$r = 1.5\text{cm}$	$r = 0.2\text{cm}$	$r = 18\text{mm}$	$d = 0.42\text{m}$