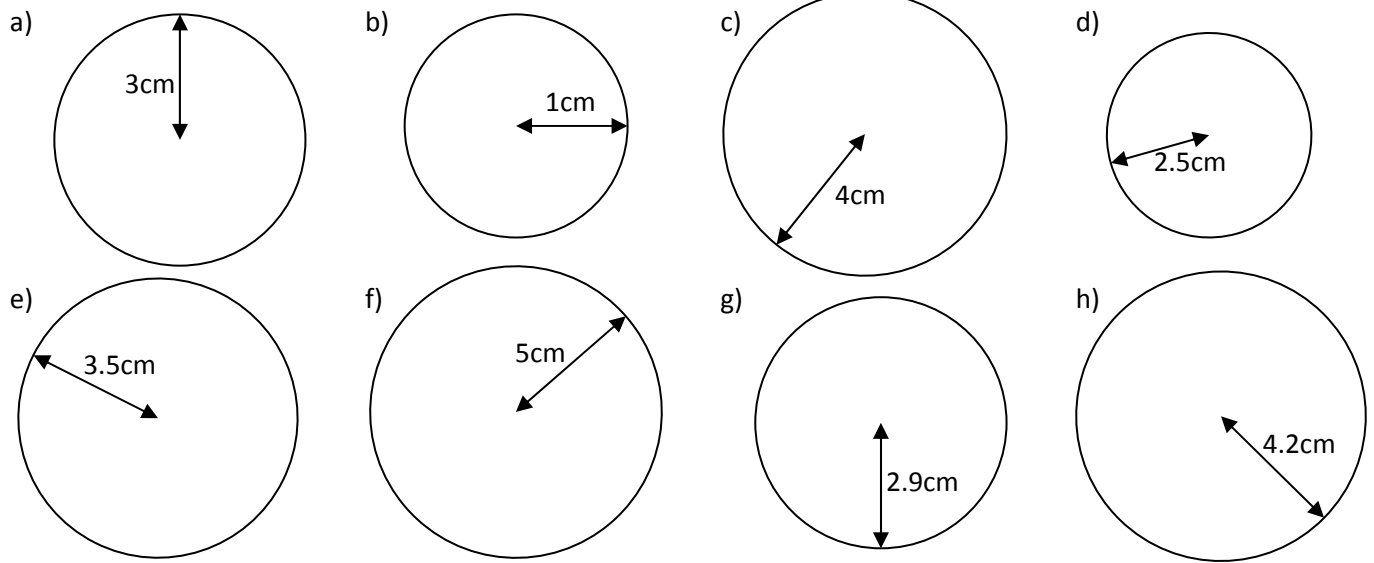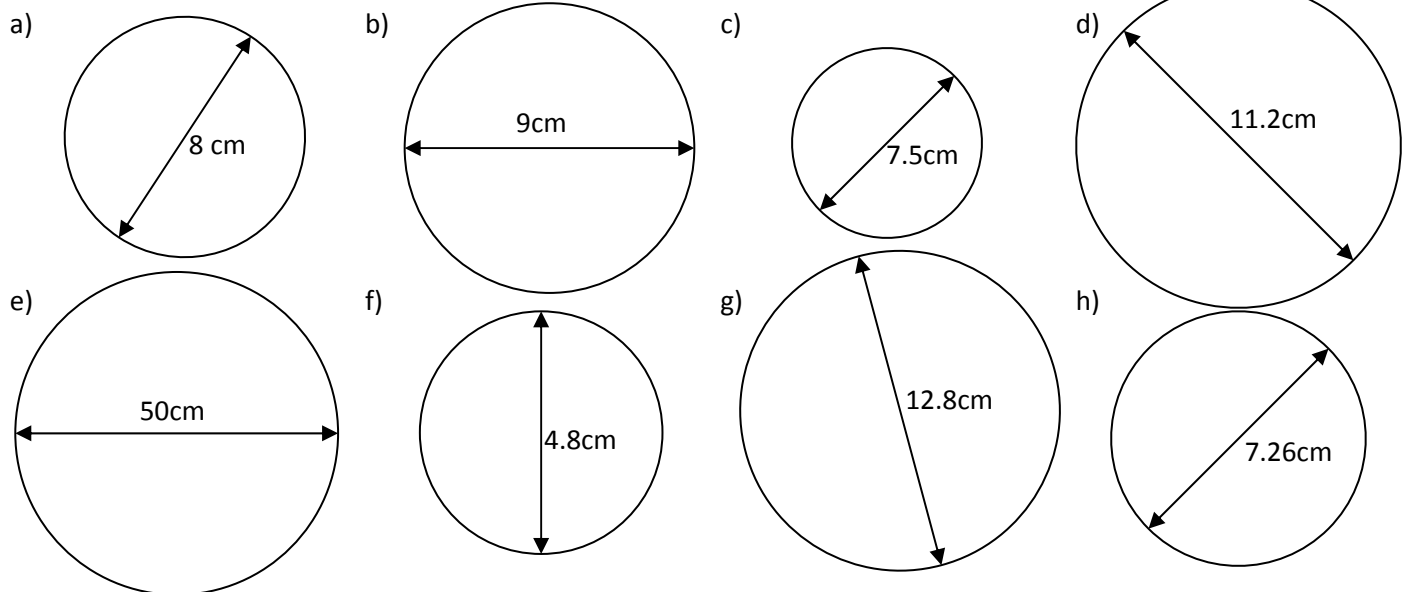# Area of a Circle
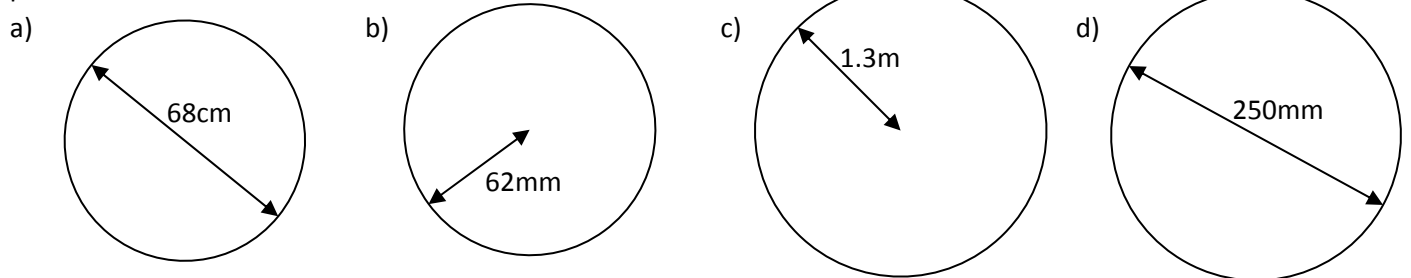
1. Find the area of these circles. Give your answers to 1 decimal place.

a)
3cm

b)
1cm

c)
4cm

d)
2.5cm

e)
3.5cm

f)
5cm

g)
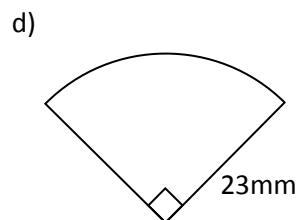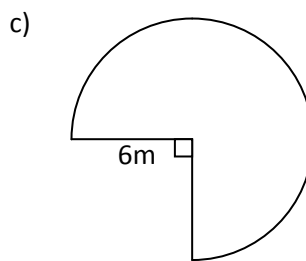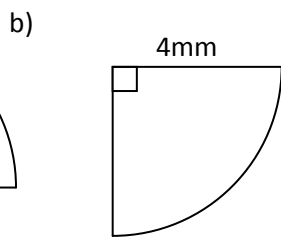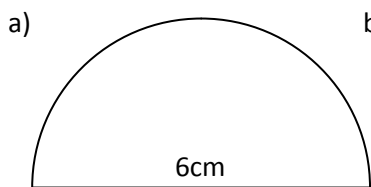2.9cm

h)
4.2cm

2. Find the area of these circles from their diameters. Give your answers to 1 decimal place.

a)
8 cm

b)
9cm

c)
7.5cm
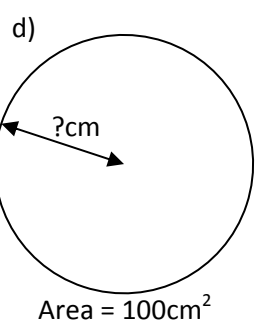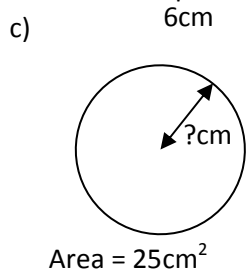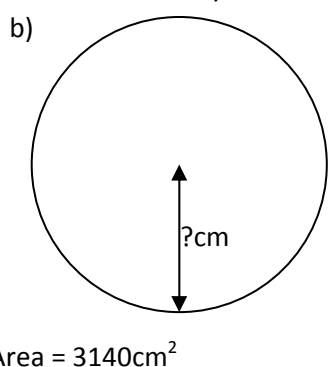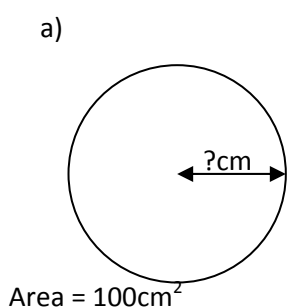
d)
11.2cm

e)
50cm

f)
4.8cm

g)
12.8cm

h)
7.26cm

3. Find the area of these circles, for some you will need to work out the radius first. Give your answers to 1 decimal place.

a)
68cm

b)
62mm

c)
1.3m

d)
250mm

4. Find the areas of these shapes. Think carefully about whether the length you are given corresponds to a radius or a diameter. Give your answers to 1 decimal place.

a)

6cm

b)

4mm

c)

6m

d)

23mm

e)

8cm

f)

13mm
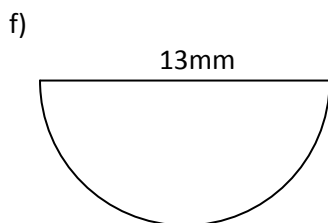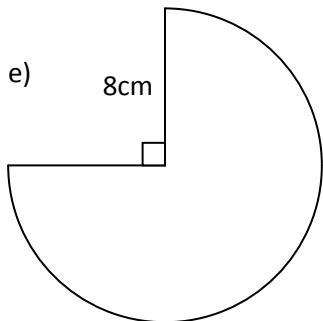
5. Find the radius in each of these circles. Give your answers to 1 decimal place.

a)

?cm

Area = 100cm^2

b)

?cm

Area = 3140cm^2

c)

6cm

?cm

Area = 25cm^2

d)

?cm

Area = 100cm^2

6. Find the area of these shapes. You will need to break each one into shapes you can work out the area of.

a)

2cm

6cm

b)

1cm

5cm

c)

5cm

6cm

d)

4cm

4cm

4cm
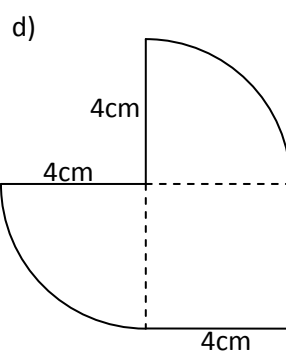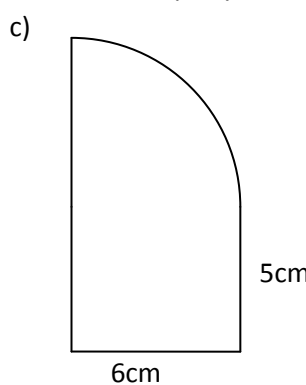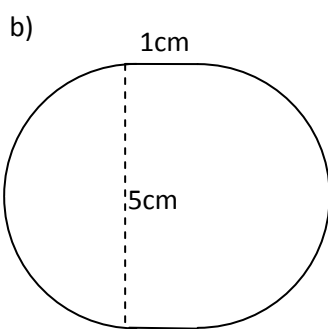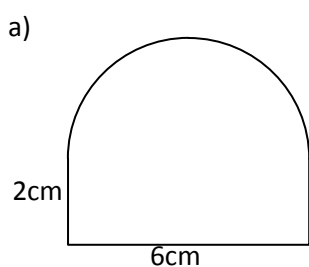
7. Emma is varnishing the floor of a circular room with diameter 8m. One tin of varnish will cover an area of 3m^2. How many tins of varnish will she need to buy to varnish the floor of the room.

8. a)The formula for the surface area of a sphere is $4\pi r^2$. By modelling the Earth as a perfect sphere and given the radius of the earth is approximately 6371km. Calculate the surface area of the Earth
b) The radius of the moon is approximately 20 times less than the radius of the Earth. Using the formula given in a, work out an approximate surface area for the moon.