Maths

## Find the radius or diameter given the area of a sector

Miss Parnham

## Find the radius or diameter given the area of a sector

1. The area of a semicircle is $24 \mathrm{~cm}^{2}$.

a) What is the area of a circle with the same radius?
b) Calculate the radius of this circle.
c) How long is the diameter?
2. Find the radius of these sectors.

Give answers to 3 significant figures.
a)

b)

3. Find the diameter of these sectors.

Give answers to 3 significant figures.
a)

b)


## Find the radius or diameter given the area of a sector

4. The area of this sector is $19.2 \mathrm{~cm}^{2}$.

a) What is the area of a circle with the same radius?
b) Calculate the radius of this circle.
c) How long is the diameter?
5. Find the radius of these sectors.

Give answers to 3 significant figures
a)

b)


6 . Find the diameter of these sectors.
Give answers to 3 significant figures


Answers

## Find the radius or diameter given the area of a sector

1. The area of a semicircle is $24 \mathrm{~cm}^{2}$.

a) What is the area of a circle with the same radius? $48 \mathrm{~cm}^{2}$
b) Calculate the radius of this circle.

$$
3.91 \text { cm }
$$

c) How long is the diameter? 7.82 cm
2. Find the radius of these sectors.

Give answers to 3 significant figures.
a)

b)

3. Find the diameter of these sectors.

Give answers to 3 significant figures.
a)



## Find the radius or diameter given the area of a sector

4. The area of this sector is $19.2 \mathrm{~cm}^{2}$.

a) What is the area of a circle with the same radius? $49.4 \mathrm{~cm}^{2}$
b) Calculate the radius of this circle.

$$
3.96 \text { cm }
$$

c) How long is the diameter? 7.93 cm
5. Find the radius of these sectors.

Give answers to 3 significant figures
a)

b)


6 . Find the diameter of these sectors.
Give answers to 3 significant figures


