5 Solve $\frac{2x - 3}{5} = 9$

$x =$ .....

(Total for Question 5 is 2 marks)

6 $Q = c^2 - 4c$

Work out the value of Q when $c = -6$

$Q =$ .....

(Total for Question 6 is 2 marks)

7 Without using a calculator and showing all your working, work out

$$2\frac{3}{4} \div \frac{11}{12}$$

Give your answer in its simplest form.

.....

(Total for Question 7 is 2 marks)

8

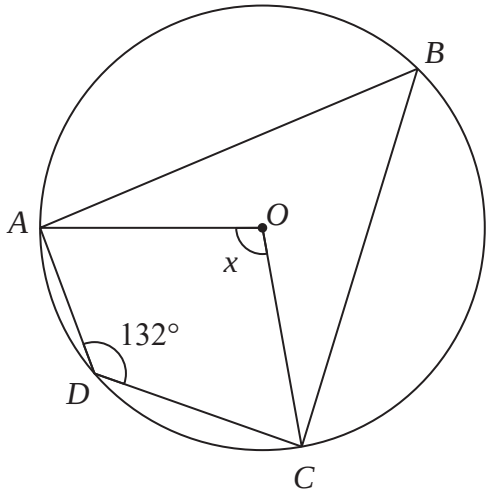


Diagram **NOT** accurately drawn

A, *B*, *C* and *D* are points on a circle, centre *O*.

Angle *ADC* = 132°

Calculate, in degrees, the size of angle *x*.

.....°

(Total for Question 8 is 2 marks)

9 $y = 4x^3 - \frac{7}{x^2}$

Find $\frac{dy}{dx}$

$\frac{dy}{dx}$ = ...

(Total for Question 9 is 2 marks)

10 Given that a is a positive integer, expand and simplify fully

$$\sqrt{5a}\left(\sqrt{20a} + a\sqrt{5a}\right)$$

.....

(Total for Question 10 is 2 marks)

11

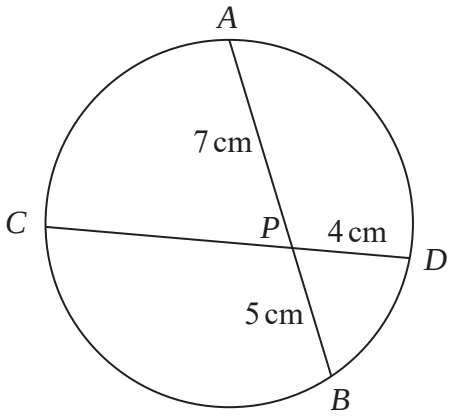


Diagram **NOT** accurately drawn

A, C, B and D are four points on a circle.

The chord AB intersects the chord CD at P.

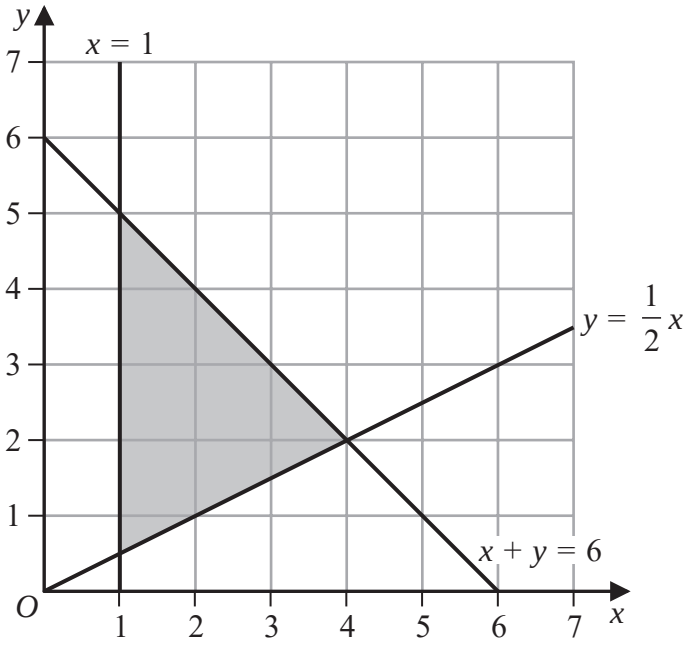
$AP = 7\,\text{cm}$ $PB = 5\,\text{cm}$ $PD = 4\,\text{cm}$

Calculate, in cm, the length of CP.

..... cm

(Total for Question 11 is 2 marks)

12



Write down the three inequalities that define the shaded region in the diagram above.

.....

.....

.....

(Total for Question 12 is 3 marks)

13 A motorbike was bought for £8600
The motorbike depreciated in value by 20% in the first year after it was bought and by 15% in each of the following years.

Find the value of the motorbike exactly 3 years after it was bought.

£ .....

(Total for Question 13 is 3 marks)