




New Maths GCSE: G18 - Sectors and arcs of Circles

Name:.....

Date:.....

The red line shows us



A) A Partial perimeter B) A Semi Circumference

C) A Curve D) An Arc

www.coopsonline.co.uk

Correct Answer: A B C D

Explanation:

.....


.....

.....

.....

.....

What is this....



A) Sector B) Fraction

C) Slice D) Angle

www.coopsonline.co.uk

Correct Answer: A B C D

Explanation:

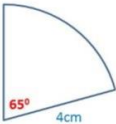
.....

.....

.....

.....

.....



Which of the following would correctly work out the area of this sector of a circle?

A $\frac{65}{360} \times \pi \times 4^2$ **B** $\frac{\pi \times 4^2}{65}$

C $\frac{65}{360} \times \pi \times 2 \times 4$ **D** $\frac{360}{65} \times \pi \times 4^2$

Correct Answer: A B C D

Explanation:

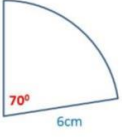
.....

.....

.....

.....

.....



Which of the following would correctly work out the arc length of this sector of a circle?

A $\frac{70}{360} \times \pi \times 12$ **B** $\frac{70}{360} \times \pi \times 6$

C $\frac{70}{360} \times \pi \times 6^2$ **D** $\frac{70}{360} \times \pi \times 12 + 12$

Correct Answer: A B C D

Explanation:

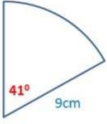
.....

.....

.....

.....

.....



Which of the following would correctly work out the perimeter of this sector of a circle?

A $\frac{41}{360} \times \pi \times 18$ **B** $\frac{41}{360} \times \pi \times 9 + 18$

C $\frac{41}{360} \times \pi \times 18 + 9$ **D** $\frac{41}{360} \times \pi \times 18 + 18$

Correct Answer: A B C D

Explanation:

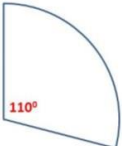
.....

.....

.....

.....

.....



Which of the following would correctly work out the arc length of this sector of a circle?

A $\frac{110}{360} \times \pi \times 10$ **B** $\frac{360}{110} \times \pi \times 10^2$

C $\frac{110}{360} \times \pi \times 20$ **D** $\frac{360}{110} \times \pi \times 20$

Correct Answer: A B C D

Explanation:

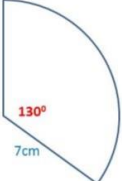
.....

.....

.....

.....

.....



Which of the following would correctly work out the area of this sector of a circle?

A $\frac{\pi \times 49}{130}$ **B** $\frac{130}{360} \times \pi \times 49$

C $\frac{360}{130} \times \pi \times 49$ **D** $\frac{130}{360} \times \pi \times 14$

Correct Answer: A B C D

Explanation:

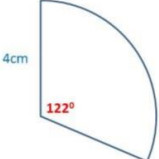
.....

.....

.....

.....

.....



4cm
122°

Which of the following would correctly work out the perimeter of this sector of a circle?

A $\frac{122}{360} \times \pi \times 8 + 4$ **B** $\frac{122}{360} \times \pi \times 16 + 8$

C $\frac{122}{360} \times \pi \times 8$ **D** $\frac{122}{360} \times \pi \times 8 + 8$

Correct Answer: A B C D

Explanation:

.....

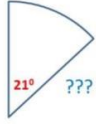
.....

.....

.....

.....

.....



21° ???

The area of this sector of a circle is 10cm².

Which of the following would correctly work out the radius?

A $r = \sqrt{\frac{10}{\pi} \times \frac{21}{360}}$ **B** $r = \sqrt{\frac{10}{\pi} \div \frac{21}{360}}$

C $r = \sqrt{\frac{10}{\pi} \div \frac{21}{360}}$ **D** $r = \frac{21}{360} \times \pi \times 10^2$

Correct Answer: A B C D

Explanation:

.....

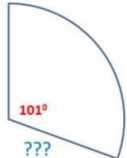
.....

.....

.....

.....

.....



101° ???

The arc length of this sector of a circle is 25cm.

Which of the following would correctly work out the radius?

A $r = \frac{25}{\pi} \div \frac{101}{360}$ **B** $r = \frac{101}{360} \times \pi \times 25$

C $r = \sqrt{\frac{25}{\pi} \div \frac{101}{360}}$ **D** $r = \frac{25}{2\pi} \div \frac{101}{360}$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....