

## Trigonometric Functions - Class XI

### Related Questions with Solutions

---

---

#### Questions

---

##### Question: 01

A circular wire of radius 7 cm is cut and bend again into an arc of a circle of radius 12 cm. The angle subtended by the arc at the centre is

- A.  $50^\circ$
- B.  $210^\circ$
- C.  $100^\circ$
- D.  $60^\circ$

---

---

#### Solutions

---

##### Solution: 01

Circumference of a circular wire of radius 7 cm =  $2\pi \times 7 = 14\pi$

$$\text{As we know } \theta = \frac{l}{r} \Rightarrow \theta = \frac{14\pi}{12} = \frac{7\pi \times 180^\circ}{6\pi} = 210^\circ .$$

---

---

#### Correct Options

---

Answer:01

Correct Options: B