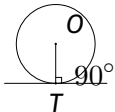


Start Tasks — Answers



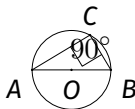
1. What is the tangent-radius angle?



Solution

A tangent always meets the radius at 90° .

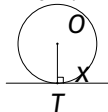
2. What is the angle in a semicircle?



Solution

The angle in a semicircle is always 90° .

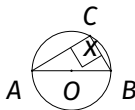
3. Find x .



Solution

Tangent-radius angle
= 90°
 $x = 90^\circ$

4. Find x .



Solution

Angle in a semicircle
= 90°
 $x = 90^\circ$

Start Tasks — Answers



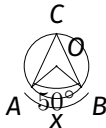
5. Find x .



Solution

Centre = $2 \times$
circumference
 $x = 80 \div 2 = 40^\circ$

6. Find x .



Solution

Centre = $2 \times$
circumference
 $x = 2 \times 50 = 100^\circ$

7. Find x .



Solution

Centre = $2 \times$
circumference
 $x = 60 \div 2 = 30^\circ$

8. The angle at the centre of a circle is 120° . Find the angle at the circumference on the same arc.

Solution

Circumference = centre $\div 2$
 $= 120 \div 2 = 60^\circ$

Start Tasks — Answers



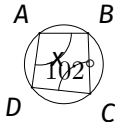
9. Find x .



Solution

Angles in the same segment are equal: $x = 53^\circ$

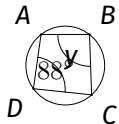
10. Find x .



Solution

Opposite angles sum to 180°
 $x = 180 - 102 = 78^\circ$

11. Find y .



Solution

Opposite angles sum to 180°
 $y = 180 - 88 = 92^\circ$

12. Opposite angles in a cyclic quadrilateral are x° and 70° . If they sum to 180° , find x .

Solution

$$\begin{aligned}x + 70 &= 180 \\x &= 110^\circ\end{aligned}$$