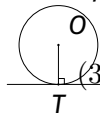


Build Tasks — Answers



1. Find p .

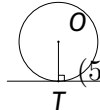


Solution

$$3p + 6 = 90$$

$$3p = 84 \Rightarrow p = 28$$

3. Find c .

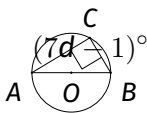


Solution

$$5c - 15 = 90$$

$$5c = 105 \Rightarrow c = 21$$

2. Find d .

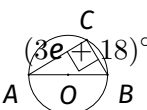


Solution

$$7d - 1 = 90$$

$$7d = 91 \Rightarrow d = 13$$

4. Find e .



Solution

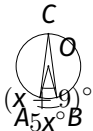
$$3e + 18 = 90$$

$$3e = 72 \Rightarrow e = 24$$

Build Tasks — Answers



5. Find x .



Solution

$$5x = 2(x + 9)$$

$$3x = 18 \Rightarrow x = 6$$

6. Find y .



Solution

$$6y - 4 = 2(2y + 8)$$

$$2y = 20 \Rightarrow y = 10$$

7. The centre angle is $(9m + 3)^\circ$. The same-arc circumference angle is $(3m + 9)^\circ$. Find m .

Solution

$$9m + 3 = 2(3m + 9)$$

$$3m = 15 \Rightarrow m = 5$$

8. The centre angle is 140° . The circumference angle is $(4n - 10)^\circ$. Find n .

Solution

$$140 = 2(4n - 10)$$

$$8n = 160 \Rightarrow n = 20$$

Build Tasks — Answers



9. Find a .

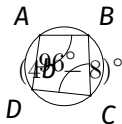


Solution

$$2a + 7 = 51$$

$$2a = 44 \Rightarrow a = 22$$

10. Find b .



Solution

$$4b - 8 + 96 = 180$$

$$4b = 92 \Rightarrow b = 23$$

11. Two angles in the same segment are $(6r - 5)^\circ$ and 73° . Find r .

Solution

$$6r - 5 = 73$$

$$6r = 78 \Rightarrow r = 13$$

12. Opposite angles in a cyclic quadrilateral are $(2s + 14)^\circ$ and $(s + 76)^\circ$. Find s .

Solution

$$2s + 14 + s + 76 = 180$$

$$3s = 90 \Rightarrow s = 30$$