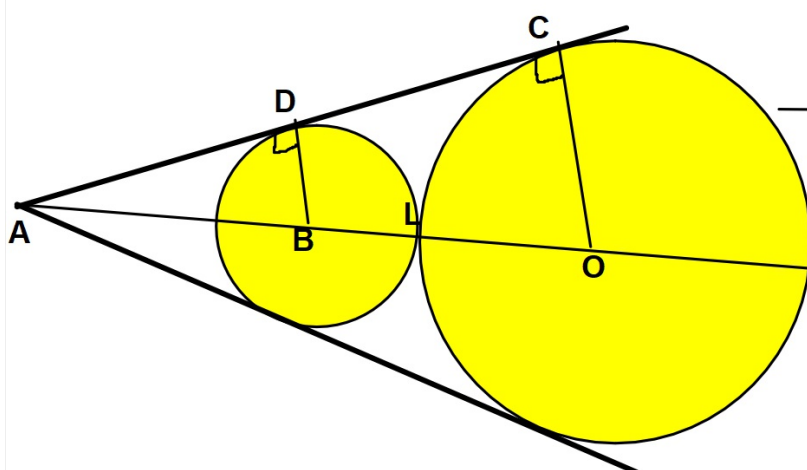




$OC=OL=6$ cm, $AB=4$ cm
 $P(BDCO)=?$

$OC \perp AC$, $BD \perp AC$ - радиусы,
 проведенные к точке касания
 $\Rightarrow \triangle ADB \sim \triangle ACO$ (по 2-м углам-
 $\angle CAO$ - общий и $\angle ADB = \angle ACO = 90^\circ$)

$\Rightarrow AB/BD = AO/OC$. Обозначим
 $BD = BL = x \Rightarrow$

$AO = AB + x + LO = 4 + 6 + x = 10 + x$

$\Rightarrow 4/x = (10+x)/6 \Rightarrow$

$x^2 + 10x = 24 \Rightarrow x = 2 \Rightarrow BD = 2$ cm

$BO = BL + LO = 2 + 6 = 8$ cm

Осталось найти DC . $\triangle ACO: AC^2 = AO^2 - CO^2 \Rightarrow AC^2 = 12^2 - 6^2 = 144 - 36 = 108$

$AC = 6\sqrt{3}$ cm $AD^2 = AB^2 - BD^2 = 4^2 - 2^2 = 12$ $AD = 2\sqrt{3}$ cm $\Rightarrow DC = AC - AD = 6\sqrt{3} - 2\sqrt{3} = 4\sqrt{3}$ cm

$\Rightarrow P(BDCO) = CO + BO + BD + DC = 6 + 8 + 2 + 4\sqrt{3} = 16 + 4\sqrt{3}$ cm