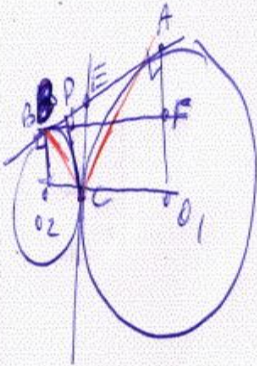


3.46
4



① $\angle BO_2O_1 + \angle AO_1O_2 = 180$
 $\angle BCO_2 = \frac{180 - \angle BO_2C}{2}$ $\angle ACO_1 = \frac{180 - \angle AO_1C}{2}$
 $\angle ACB = 180 - \angle BCO_2 - \angle ACO_1 = 180 - \frac{180 - \angle BO_2C}{2} - \frac{180 - \angle AO_1C}{2} =$
 $= \frac{1}{2}(\angle BO_2C + \angle AO_1C) = \frac{1}{2} \cdot 180 = 90$

② $\angle DEA = 90^\circ = \angle EDC$
 $\angle EAC = \alpha = \angle ECA$

$\left. \begin{array}{l} \text{(alt \(\angle\)) } \angle DEC = 2\alpha \\ \text{(alt \(\angle\)) } \angle AOC = 2\alpha \\ \text{(alt \(\angle\)) } \angle AOC = \angle AFB \end{array} \right\} \angle DEC = \angle AFB$

$\left. \begin{array}{l} \triangle DEC \sim \triangle AFB \text{ (S.S.)} \\ \text{alt \(\angle\)} \angle BFO_2 \end{array} \right\} \text{③}$

$AF = AO_1 - BO_2 = R - r = 6$
 $BF = O_1O_2 = r + R = 10$
 $BE = EC = AE$ (alt \(\angle\))

$$AB = \sqrt{BF^2 - AF^2} = \sqrt{10^2 - 6^2} = 8$$

$$EC = \frac{1}{2} AB = 4$$

$$\frac{EC}{BF} = \frac{DC}{AB}$$

$$DC = \frac{4 \cdot 8}{10} = 3.2$$