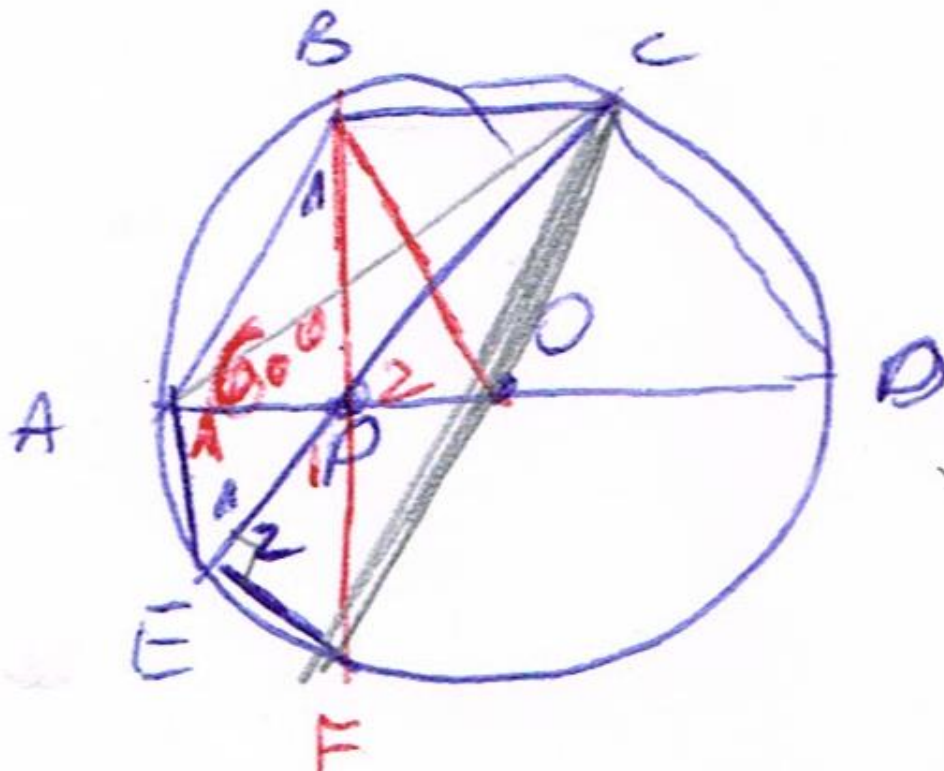


1.89
6

$\angle E = \angle D = 60^\circ$



ד. \overline{AD} תחתית $\triangle ABC$ כי \overline{AD} הוא \perp ל \overline{BC} כי $\angle A = \angle C = 60^\circ$
 • \overline{AD} תחתית $\triangle ABC$ כי \overline{AD} הוא \perp ל \overline{BC} כי $\angle A = \angle C = 60^\circ$
 • \overline{BF} הוא \perp ל \overline{AD} כי $\angle B = \angle D = 60^\circ$

$BP = PF = x$ (נ"ל)

הערה: $x^2 = AP \cdot PD = \sqrt{7} \cdot 3\sqrt{7} = 21 \rightarrow x = \sqrt{21}$

הערה: $\triangle ABC$ הוא $\triangle ABC$, $\triangle ABC$ • $\angle CBD = 90^\circ \leftarrow \angle B_1 = 30^\circ$ ✓
 $\angle E_1 = \angle D = 60^\circ$

$\angle E_2 = 90^\circ \leftarrow 180^\circ = \angle B_1 + \angle AEF$ (כי \overline{AD} תחתית $\triangle ABC$)

$\angle P_1 = \angle P_2$ (כי \overline{AD} תחתית $\triangle ABC$)

$\frac{EP}{BP} = \frac{PF}{PC}$

\leftarrow (S.S) $\triangle BPC \sim \triangle EPF$

$PC = \sqrt{BC^2 + BP^2} = \sqrt{r^2 + BP^2} = \sqrt{28 + 21} = \sqrt{49}$

$EP = \frac{\sqrt{21} \cdot \sqrt{21}}{\sqrt{49}} = 3$