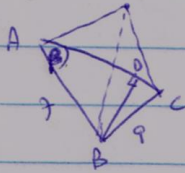


4.2
6



פרגון נורמן .lc

$$DC = \sqrt{BC^2 - BD^2} = \sqrt{81 - 45} = 6$$

$$AD = \sqrt{AB^2 - BD^2} = \sqrt{49 - 45} = 2$$

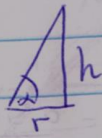
$$AC = AD + DC = 8$$

$$81 = 49 + 64 - 2 \cdot 7 \cdot 8 \cos \beta \rightarrow \cos \beta = \frac{2}{7} \rightarrow \sin \beta = \frac{\sqrt{45}}{7} \quad : \Delta ABC \text{ פרגון נורמן } \text{עלון}$$

$$\frac{\sin \beta \cdot BA \cdot AC}{2} = r \cdot p \rightarrow \frac{\frac{\sqrt{45}}{7} \cdot 7 \cdot 8}{2} = \frac{(7+8+9)r}{2} \quad \text{אלו 3 זוויות זווית נכונה}$$

פירוט שטח אחר

$$r = \frac{8\sqrt{45}}{24} = \sqrt{5}$$



$$h = r \tan \alpha = \sqrt{5} \tan \alpha$$

$$V = \frac{1}{3} S_{ABC} \cdot h = \frac{1}{3} \cdot \underbrace{12\sqrt{5}}_{S_{ABC}} \cdot \sqrt{5} \tan \alpha = 20 \tan \alpha$$