

$$\hat{B} = 45^\circ$$

$$\overline{AH} = 2\sqrt{2} \text{ cm}$$

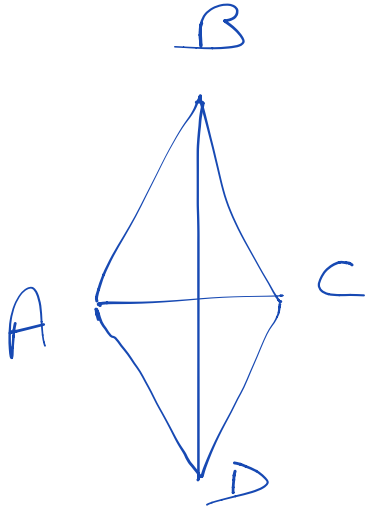
$$\overline{AC} = 3 \text{ cm}$$

$$\overline{AH} \cong \overline{HB}$$

$$\overline{AB} = \overline{AH}\sqrt{2} = 2\sqrt{2} \cdot \sqrt{2} = 4 \text{ cm}$$

$$\overline{CH} = \sqrt{9 - 8} = \sqrt{1} = 1$$

$$P = 3 + 4 + 1 + 2\sqrt{2} = (8 + 2\sqrt{2}) \text{ cm}$$



$$A = 40 \text{ cm}^2$$

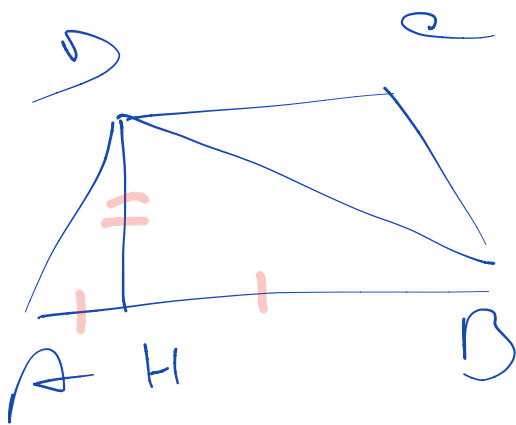
$$\overline{AC} = 5 - \sqrt{5}$$

$$A = \frac{\overline{AC} \cdot \overline{BD}}{2}$$

$$\overline{BD} = \frac{2A}{\overline{AC}} = \frac{80}{5 - \sqrt{5}} \cdot \frac{5 + \sqrt{5}}{5 + \sqrt{5}} =$$

$$= \frac{80(5 + \sqrt{5})}{25 - 5} = \frac{80(5 + \sqrt{5})}{20} =$$

$$= 4(5 + \sqrt{5})$$



$$\overline{HP} = 3\sqrt{6}$$

$$\overline{AH} = 3\sqrt{2}$$

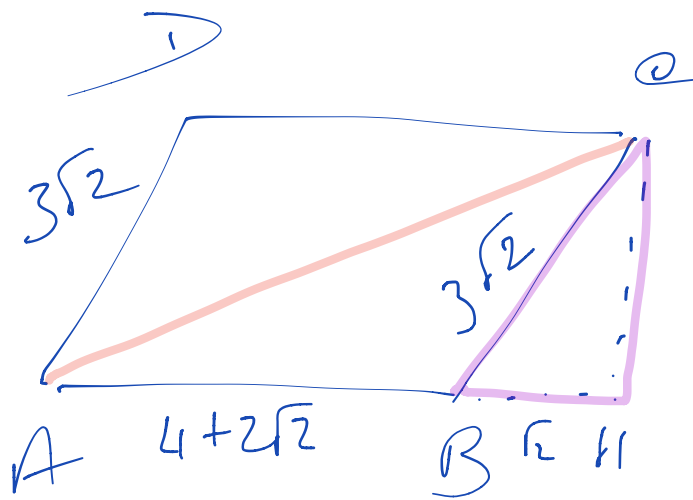
$$\overline{HB} = 9\sqrt{2}$$

$$\overline{AD} = 6\sqrt{2}$$

$$\overline{DB} = \sqrt{54 + 162} = \sqrt{216} = 6\sqrt{6}$$

$$\overline{AD}^2 + \overline{DB}^2 = \overline{AB}^2$$

$$72 + 216 = 288$$



$$\overline{AB} = 4 + 2\sqrt{2}$$

$$\overline{AD} = 3\sqrt{2}$$

$$\overline{BH} = \sqrt{2}$$

$$\sqrt{8x^3 - 8x^2 + 2x} - \sqrt{18x} + \sqrt{4x^2}$$

$$\begin{cases} 2x(4x^2 - 4x + 1) \geq 0 \\ 18x \geq 0 \\ 4x^2 \geq 0 \end{cases} \begin{cases} x(2x-1)^2 \geq 0 \\ x \geq 0 \\ x^2 \geq 0 \end{cases}$$

$$x \geq 0$$

$$\underline{\underline{\sqrt{4x^2} = 2|x|}}$$

$$\frac{x}{x^2-5} - \frac{1}{x-\sqrt{5}} - \frac{2}{x+\sqrt{5}} = 0$$

$$\frac{x}{(x-\sqrt{5})(x+\sqrt{5})} - \frac{1}{x-\sqrt{5}} - \frac{2}{x+\sqrt{5}} = 0$$

$$\frac{\cancel{x} - \cancel{x} - \sqrt{5} - 2x + 2\sqrt{5}}{\cancel{(x-\sqrt{5})(x+\sqrt{5})}} = 0$$

$$0 \in x \neq \pm \sqrt{5}$$

$$-2x = -\sqrt{5}$$

$$x = \frac{\sqrt{5}}{2} \quad \underline{\text{acc}}$$

$$\sqrt{x^3} = x\sqrt{x}$$

$$\begin{array}{r} 3 \overline{) 2} \\ \underline{1} \\ 1 \\ \underline{1} \\ 0 \end{array}$$

$$\sqrt[3]{x^5} = x\sqrt[3]{x^2}$$

$$\begin{array}{r} 5 \overline{) 3} \\ \underline{2} \\ 1 \end{array}$$

$$\sqrt[5]{x^3} \text{ non si pu\`o fare}$$

$$\sqrt[6]{x^3} = \sqrt{x}$$

$$\sqrt[4]{x^5} = x \sqrt[4]{x}$$

$$\sqrt[3]{x^3} = x$$

$$\sqrt[4]{x^6} = |x| \sqrt[4]{x^2} = |x| \sqrt{|x|}$$

> 0

$$\sqrt{|x|^3} = |x| \sqrt{|x|}$$