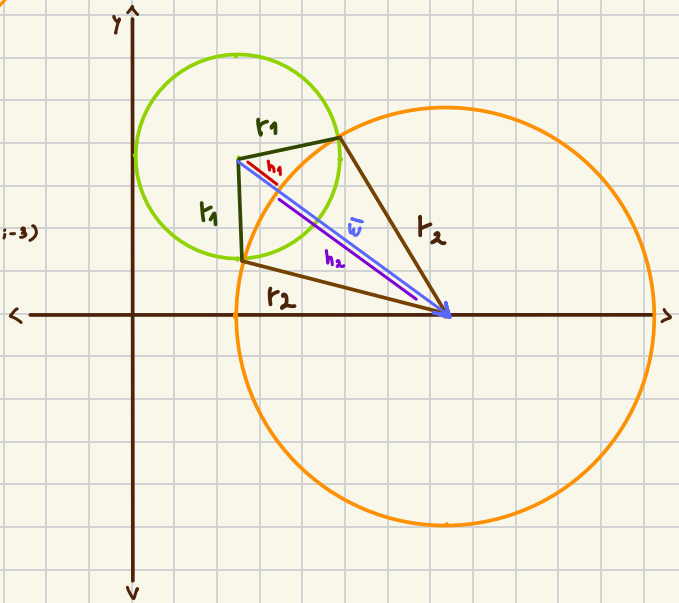


$$AB^2 = BH^2 + AH^2$$

$$r_1^2 = h_1^2 + b^2$$

$$r_1^2 = h_1^2 + b^2 \quad \wedge \quad r_2^2 = h_2^2 + b^2 \quad \wedge \quad h_2 + h_1 = ||w||$$

$$|b| = \sqrt{r_1^2 - h_1^2} \quad \wedge \quad |b| = \sqrt{r_2^2 - h_2^2}$$



$$\begin{cases} \sqrt{r_1^2 - h_1^2} = \sqrt{r_2^2 - h_2^2} \\ h_1 + h_2 = ||w|| \end{cases} \quad , \quad \begin{aligned} r_1 &= 2 \\ r_2 &= 4 \\ \vec{w} &= (6; 0) - (-2; 3) = (4; -3) \\ ||w|| &= \sqrt{4^2 + (-3)^2} = 5 \end{aligned}$$

$$h_2 = 5 - h_1$$

$$\sqrt{4 - h_1^2} = \sqrt{16 - (5 - h_1)^2} \quad \text{simfra +!}$$

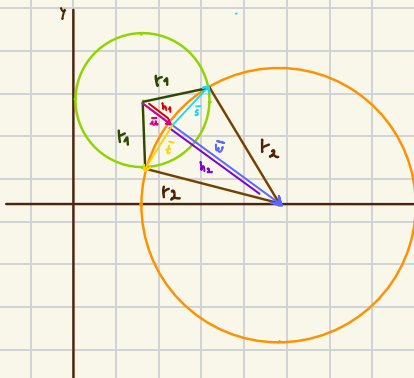
$$4 - h_1^2 = 16 - (5 - h_1)^2$$

$$-h_1^2 = 12 - 25 + 10h_1 - h_1^2$$

$$\frac{13}{10} = h_1$$

factor common:  $\frac{13}{10} = \frac{13}{50}$

$$\vec{u} = \frac{13}{50} \cdot \vec{w} = (26/25; -39/50)$$



$$\vec{w} = (39/50; 26/25), \quad \vec{w} \perp \vec{u}$$

$$|b| = \sqrt{2^2 - \left(\frac{13}{10}\right)^2}$$

$$b = \frac{\sqrt{231}}{10} \quad \vee \quad b = -\frac{\sqrt{231}}{10}$$

$b$  é uma distância!

$$||\vec{w}|| = \sqrt{(39/50)^2 + (26/25)^2} = \frac{13}{10}$$

factor common:  $\frac{\sqrt{231}}{10} = \frac{\sqrt{231}}{13}$

$$\frac{3\sqrt{231}}{50}$$

$$\vec{s} = \vec{w} \cdot \frac{\sqrt{231}}{13} = \left(\frac{3\sqrt{231}}{50}; \frac{\sqrt{231}}{25}\right)$$

$$\vec{t} = -\left(\frac{3\sqrt{231}}{50}; \frac{\sqrt{231}}{25}\right)$$