

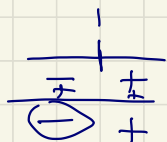
$$\frac{|x^2 - 6x + 8|}{x^3 - 1} \leq 0$$

Guess:  $x < 1$

$$\frac{|(x-4)(x-2)|}{(x-1)(x^2+x+1)} \leq 0$$

$$\begin{aligned} \alpha + \beta &= -6 \\ \alpha \cdot \beta &= 8 \end{aligned}$$

$$\begin{aligned} N \geq 0 &\longrightarrow A) |(x-4)(x-2)| \geq 0 \quad \forall x \in \mathbb{R} \\ D > 0 &\quad x^3 - 1 > 0 \quad x > 1 \end{aligned}$$



$x < 1$  " "

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$d_1$

$$\begin{aligned} d_1 &= 30 \text{ km} & v & \text{ km/h} \\ d_2 &= 40 \text{ km} & v-30 & \text{ km/h} \end{aligned}$$

- 1) Se  $v = 70 \text{ km/h}$  quanto ci mette?
- 2) Per quali  $\bar{v} > 30$ ,  $t < 1 \text{ h}$ ?

$$1) \quad 40 \frac{\text{km}}{\text{h}} \cdot t_1 = 30 \text{ km} \quad \rightsquigarrow \quad t_1 = \frac{30}{40} \text{ h} = \frac{3}{4} \text{ h}$$

$$40 \frac{\text{km}}{\text{h}} \cdot t_2 = 40 \text{ km} \quad \rightsquigarrow \quad t_2 = 1 \text{ h}$$

$$t = t_1 + t_2 = 1 \text{ h} + \frac{3}{4} \text{ h} \approx 1 \text{ h e } 25 \text{ min} \quad 60 \text{ min} : 1 \text{ h} = x \text{ min} : \frac{3}{4} \text{ h}$$

$$x \text{ min} = \frac{3}{4} 60 \text{ min} \approx 45 \text{ min}$$

$$2) \quad v \cdot t_1 = 30 \quad \rightsquigarrow \quad t_1 = \frac{30}{v}$$

$$(v-30) \cdot t_2 = 40 \quad \rightsquigarrow \quad t_2 = \frac{40}{v-30}$$

$$t = t_1 + t_2 = \boxed{\frac{30}{v} + \frac{40}{v-30} < 1}$$

$$\frac{30v - 900 + 40v - v^2 + 30v}{v(v-30)} < 0$$

$$\frac{v^2 - 100v + 900}{v(v-30)} > 0 \quad \frac{(v-90)(v-10)}{v(v-30)} > 0$$

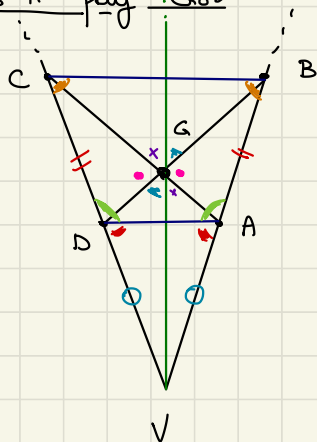
$$\begin{aligned} N_1 > 0 & \quad v > 90 \\ N_2 > 0 & \quad v > 10 \\ D_1 > 0 & \quad v > 0 \\ D_2 > 0 & \quad v > 30 \end{aligned}$$

	0	10	30	90	
	-	-	-	-	+
	-	-	+	+	+
	-	+	+	+	+
	-	-	-	+	+
	+	-	+	-	+

Soluzioni

$v > 90 \frac{\text{km}}{\text{h}}$   
 Poiché  $v > 30 \frac{\text{km}}{\text{h}}$

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Hip  $VD \cong AV$   
 $CD \cong AB$

Th:  $VG$  bisettrice di  $\hat{V}$   
 $\hat{DVG} \cong \hat{GVA}$

- Dim:
- 1) Vende chiaro
  - 2)  $\hat{ADC} \cong \hat{ABB}$
  - 3)  $\triangle AGD$  isoscele
  - 4)  $\hat{GDV} \cong \hat{GAV}$