DATA

$y = \frac{1}{2} \cdot \left(-\frac{1}{2}\right) \cdot \left(-\frac{3}{2}\right) \Rightarrow \frac{3}{8}$

30 | 8
24 | 0,37
60

$y > 0$

Alternativa (E)

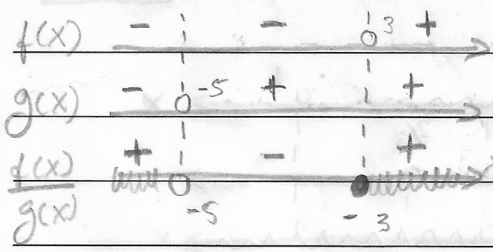
---

101. Resolução: ☑

$\frac{\overbrace{x-3}^{f(x)}}{\underbrace{5+x}_{g(x)}} \geq 0$

$f(x) = x - 3 \rightarrow x = 3$ RAIZ

$g(x) = 5 + x \rightarrow x = -5$ RAIZ



$S = \{x \in \mathbb{R} / x < -5 \text{ OU } x \geq 3\}$

Alternativa (C)

---

102 - Resolução: ☑

$\sqrt{\frac{x+1}{x-2}}$

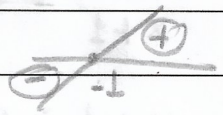
1º → $x - 2 \neq 0$

$x \neq 2$

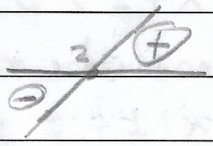
$\frac{\overbrace{x+1}^{f(x)}}{x-2} \geq 0$

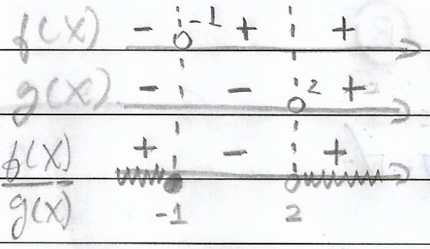
$\rightarrow g(x)$

$f(x) = x + 1 \rightarrow x = -1$



$g(x) = x - 2 \rightarrow x = 2$





$S = \{x \in \mathbb{R} / x \leq -1 \text{ ou } x > 2\}$

Alternativa (D)

---

103. Resolução: ☑

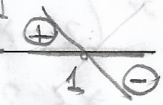
$y = \sqrt{\frac{1-x}{1+x}}$

$\frac{\overbrace{1-x}^{f(x)}}{\underbrace{1+x}_{g(x)}} \geq 0$

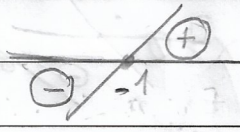
$f(x) = 1 - x \rightarrow -x + 1 = 0$

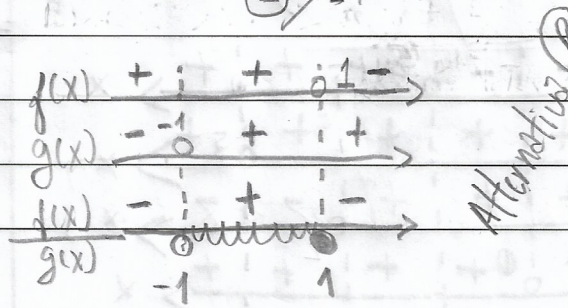
$-x = -1$

$x = 1$



$g(x) = x + 1 \rightarrow x = -1$





Alternativa (B)

$S = \{x \in \mathbb{R} / -1 < x \leq 1\}$