

6. Desarrolla la siguiente expresión  $|5x+15| - |x-2| =$

$$|5x+15| - |x-2| = \begin{cases} 5x+15 - |x-2| & \text{si } 5x+15 \geq 0 \rightarrow \text{si } x \geq -3 \\ -5x-15 - |x-2| & \text{si } 5x+15 < 0 \rightarrow \text{si } x < -3 \end{cases}$$

$$\begin{cases} 5x+15 - (x-2) & \text{si } x-2 \geq 0 \rightarrow x \geq 2 \\ & x \geq -3 \\ 5x+15 - (-x+2) & \text{si } x-2 < 0 \rightarrow x < 2 \\ & x \geq -3 \end{cases} \Rightarrow \begin{cases} 4x+17 & \text{si } x \geq 2 \\ 6x+13 & \text{si } -3 \leq x < 2 \\ -6x-13 & \text{si } x < -3 \\ -4x-17 & \text{si } x < -3 \end{cases}$$

7. Calcula utilizando fracciones generatrices  $1,28 + 2,1\overline{3} - 5,1\overline{7} =$

$$N = 1,28 \rightarrow 100N = 128 \rightarrow N = \frac{128}{100}$$

$$\begin{array}{r} 100N = 213,33\dots \\ -10N = 21,33\dots \\ \hline 90N = 192 \end{array}$$

$$\rightarrow N = \frac{192}{90}$$

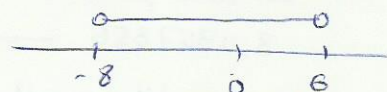
$$\begin{array}{r} 100N = 517,17\dots \\ -N = 5,17\dots \\ \hline 99N = 512 \end{array}$$

$$\rightarrow N = \frac{512}{99}$$

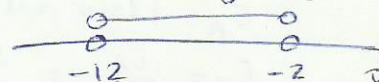
$$\frac{128}{100} + \frac{192}{90} - \frac{512}{99} = \frac{-17408}{9900} = \frac{-4352}{2475} = -1,7584$$

8. Representa en la recta real, como desigualdad, como intervalo o como entorno

a)  $E(-1, 7) \rightarrow |x+1| < 7 \rightarrow x \in (-8, 6)$



b)  $|x+7| < 5 \rightarrow E(-7, 5) \rightarrow x \in (-12, -2)$



c)  $|2x-5| \geq 3 \rightarrow |2x-5| < 3 \rightarrow |x - 5/2| < 3/2$

$$\left( E(5/2, 3/2) \rightarrow x \in (1, 4) \right)$$

$$\boxed{x \in (-\infty, 1] \cup [4, +\infty)}$$