

GUIA DE APRENDIZAJE N.2

Ejercicios:

1. Calcula:

a. $|1 - 3\pi - 5\pi| = |-8\pi| = 8\pi$

b. $|13 + 2| = |15| = 15$

c. $|2,5 + (-8,3)| = |-5,8| = 5,8$

d. $|7| - |-8| = 7 - 8 = -1$

e. $|1 - 9 + 3| - |11| = |-6| - |11| = 6 - 11 = -5$

f. $(-2) \times |6 - 7| = (-2) \times |-1| = (-2) \times 1 = -2$

g. $|1 - 4 - 12| \div 8 = |-16| \div 8 = 16 \div 8 = 2$

h. $4 \times |1 - 15 + 13| = 4 \times |-2| = 4 \times 2 = 8$

2. Completa la tabla:

A	B	C	d(A,B)	d(B,C)	d(A,C)
-7	-4	2	3	6	9
0,2	-2,1	-3,5	2,3	1,4	3,7
$-\frac{27}{10}$	3	-2	5,7	5	0,7
π	-3π	5π	4π	8π	4π
$\frac{4}{3}$	$\frac{1}{6}$	$-\frac{2}{9}$	$\frac{1}{6}$	$\frac{7}{18}$	$\frac{14}{9}$

Procesos de la Tabla

Primera Columna $d(A, B)$

$$* d(A, B) = d(-7, -4) = |-4 - (-7)| = |-4 + 7| = |3| = 3$$

$$* d(A, B) = d(0, 2, -2, 1) = |2 - 1 - 0, 2| = |-2, 3| = 2, 3$$

$$* d(A, B) = d\left(-\frac{27}{10}, 3\right) = \left|3 - \left(-\frac{27}{10}\right)\right| = \left|3 + \frac{27}{10}\right| = \left|\frac{30 + 27}{10}\right| =$$

$$\left|\frac{57}{10}\right| = |5,7| = 5,7$$

$$* d(A, B) = d(\pi, -3\pi) = |-3\pi - \pi| = |-4\pi| = 4\pi$$

$$* d(A, B) = d\left(\frac{4}{3}, \frac{1}{6}\right) = \left|\frac{1}{6} - \frac{4}{3}\right| = \left|\frac{1 - 8}{6}\right| = \left|-\frac{7}{6}\right| = \frac{7}{6}$$

Segunda Columna $d(B, C)$

$$* d(B, C) = d(-4, 2) = |2 - (-4)| = |2 + 4| = |6| = 6$$

$$* d(B, C) = d(-2, 1, -3, 5) = |-3, 5 - (-2, 1)| = |-3, 5 + 2, 1| = |-1, 4| = 1, 4$$

$$* d(B, C) = d(3, -2) = |-2 - 3| = |-5| = 5$$

$$* d(B, C) = d(-3\pi, 5\pi) = |5\pi - (-3\pi)| = |5\pi + 3\pi| = |8\pi| = 8\pi$$

$$* d(B, C) = d\left(\frac{1}{6}, -\frac{2}{9}\right) = \left|-\frac{2}{9} - \frac{1}{6}\right| = \left|-\frac{4 - 3}{18}\right| = \left|-\frac{1}{18}\right| = \frac{1}{18}$$

Tercera Columna $d(A, C)$

$$* d(A, C) = d(-7, 2) = |2 - (-7)| = |2 + 7| = |9| = 9$$

$$* d(A, C) = d(0, 2, -3, 5) = |-3, 5 - 0, 2| = |-3, 7| = 3, 7$$

$$* d(A, C) = d\left(-\frac{27}{10}, -2\right) = \left| -2 - \left(-\frac{27}{10}\right) \right| = \left| -2 + \frac{27}{10} \right| =$$

$$\left| \frac{-20 + 27}{10} \right| = \left| \frac{7}{10} \right| = \frac{7}{10} = 0,7$$

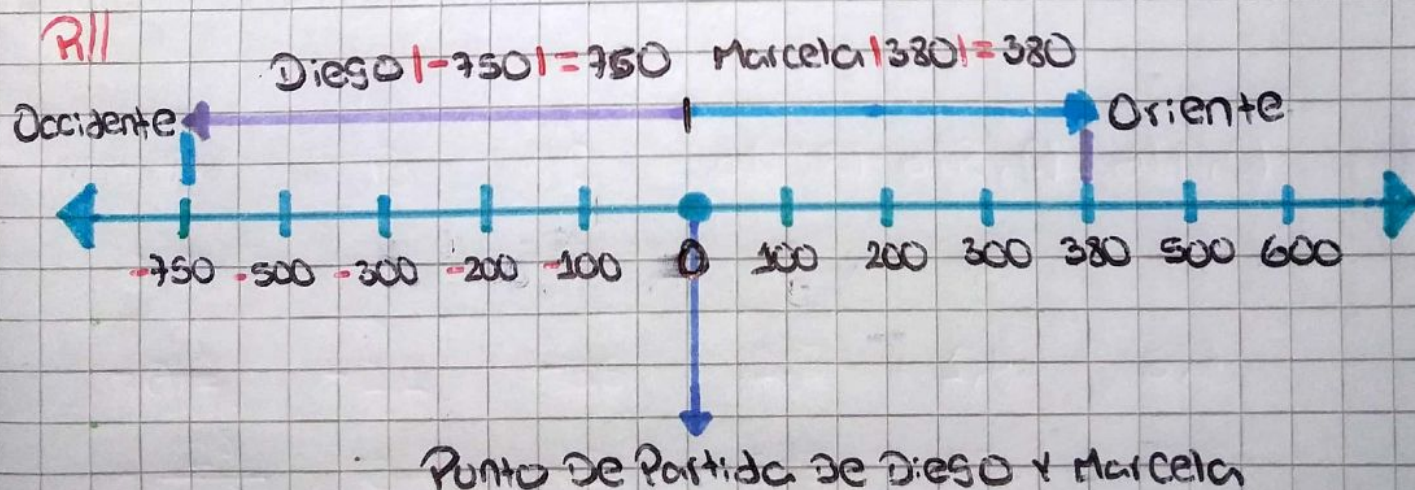
$$* d(A, C) = d(\pi, 5\pi) = |5\pi - \pi| = |4\pi| = 4\pi$$

$$* d(A, C) = d\left(\frac{4}{3}, -\frac{2}{9}\right) = \left| \frac{4}{3} - \left(-\frac{2}{9}\right) \right| = \left| \frac{4}{3} + \frac{2}{9} \right| = \left| \frac{12 + 2}{9} \right| =$$

$$\left| \frac{14}{9} \right| = \frac{14}{9}$$

3. Diego y Marcela caminaron sobre una carretera en forma de línea recta. Ellos iniciaron su caminata en el mismo punto, pero en sentidos opuestos. Diego avanzó 750m al occidente y Marcela avanzó 380m al oriente.

a. ¿a qué distancia del punto de partida está cada uno? Representa en la recta numérica sus posiciones.



b. ¿Qué distancia separa a los dos caminantes?

R// $d(-750, 380) = |380 - (-750)| = |380 + 750| = |1130|$
 $= 1130$ metros

4. Asocia cada distancia con un valor de x que satisfaga la igualdad.

a. $d(x, -7) = 10$

b. $d(8, x) = 12$

c. $d(-10, x) = 3$

d. $d(x, 5) = 7$

e. $d(x; 3, 8) = 6$

-2

-13

-2, 2

-4

3