

Plus De  
Bonnes  
Notes



Dimanche 06 février 2022.

Quatrième: équations.

Défi du jour: lorsqu'on ajoute 3 nombres entiers consécutifs, on trouve 143 490. Quels sont ces 3 nombres.

$$x + x + 1 + x + 2 = 143\,490$$

$$3x + 3 = 143\,490$$

$$3x + 3 - 3 = 143\,490 - 3$$

$$3x = 143\,487$$

$$\frac{3x}{3} = \frac{143\,487}{3}$$

$$x = 47\,829$$

Les 3 nombres consécutifs sont:

47 829 ; 47 830 ; 47 831.

EXO 1111

a.  $2x + 5 = 5x - 4$

$$2x + 5 - 5x = 5x - 4 - 5x$$

$$-3x + 5 = -4$$

$$-3x + 5 - 5 = -4 - 5$$

$$-3x = -9$$

$$\frac{-3x}{-3} = \frac{-9}{-3}$$

$$x = 3$$



b.  $3x - 8 = -8x + 2$

$$3x - 8 + 8x = -8x + 2 + 8x$$

$$11x - 8 = +2$$

$$11x - 8 + 8 = +2 + 8$$

$$11x = 10$$

$$\frac{11x}{11} = \frac{10}{11}$$

$$x = \frac{10}{11}$$

c.  $2x + 1 = x - 4$

$$2x + 1 = x - 4$$

$$2x + 1 - x = x - 4 - x$$

$$2x + 1 + 4 = x - 4 + 4$$

$$2x + 5 = x$$

$$x + 1 = -4$$

$$2x + 5 - 5 = x - 5$$

$$x + 1 - 1 = -4 - 1$$

$$2x = x - 5$$

$$x = -5$$

$$2x - x = x - 5 - x$$

$$x = -5$$

d.  $-8x - 3 = -3x - 6$

$$-8x - 3 + 3x = -3x - 6 + 3x$$

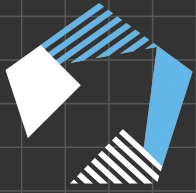
$$-5x - 3 = -6$$

$$-5x - 3 + 3 = -6 + 3$$

$$-5x = -3$$

$$\frac{-5x}{-5} = \frac{-3}{-5}$$

$$x = \frac{3}{5}$$



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$$d. 4x - 5 = 2x + 2.$$

$$4x - 5 - 2x = 2x + 2 - 2x.$$

$$2x - 5 = +2.$$

$$2x - 5 + 5 = +2 + 5.$$

$$2x = 7$$

$$\frac{2x}{2} = \frac{7}{2}$$

$$x = \frac{7}{2}$$

EXO 1115:

$$a. 3x + 4 = 8x - 21.$$

$$3x + 4 - 4 = 8x - 21 - 4.$$

$$3x = 8x - 25.$$

$$3x - 8x = 8x - 25 - 8x.$$

$$-5x = -25.$$

$$\frac{-5x}{-5} = \frac{-25}{-5}$$

$$x = 5$$

$$b. -2x + 1 = 7x - 80$$

$$-2x + 1 - 7x = 7x - 80 - 7x.$$

$$-9x + 1 = -80.$$

$$-9x + 1 - 1 = -80 - 1.$$

$$-9x = -81$$

$$\frac{-9x}{-9} = \frac{-81}{-9} = 9$$

$$c. 2x - 3 = 5x + 3.$$

$$2x - 3 - 5x = 5x + 3 - 5x$$

$$-3x - 3 = +3.$$

$$-3x - 3 + 3 = +3 + 3.$$

$$-3x = 6.$$

$$\frac{-3x}{-3} = \frac{6}{-3}$$

$$x = -2.$$

$$d. 5x - 3 = 3x - 5.$$

$$5x - 3x - 3 = 3x - 5 - 3x.$$

$$2x - 3 = -5.$$

$$2x - 3 + 3 = -5 + 3.$$

$$2x = -2$$

$$\frac{2x}{2} = \frac{-2}{2}$$

$$x = -1.$$

EXO 4905:

$$a. 2(x+3) = 4(x-1).$$

$$2x + 6 = 4x - 4. \quad 2x + 6 + 4 = 4x - 4 + 4$$

$$2x + 10 = 4x.$$

$$2x + 6 - 4x = 4x - 4 - 4x$$

$$2x + 10 - 10 = 4x - 10$$

$$-2x + 6 = -4.$$

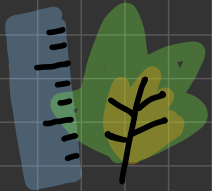
$$2x = 4x - 10$$

$$-2x + 6 - 6 = -4 - 6. \quad 2x - 4x = 4x - 10 - 4x$$

$$-2x = -10$$

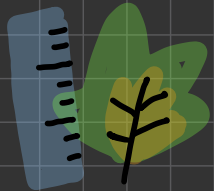
$$-2x = -10$$

$$\frac{-2x}{-2} = \frac{-10}{-2} = 5.$$





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$$b. \quad 5(1-x) = 3(2x+1).$$

$$5 - 5x = 6x + 3.$$

$$5 - 5x - 6x = 6x + 3 - 6x.$$

$$5 - 11x = 3.$$

$$5 - 11x - 5 = 3 - 5.$$

$$-11x = -2.$$

$$\frac{-11x}{-11} = \frac{-2}{-11}$$

$$x = \frac{2}{11}$$

c.

$$\begin{array}{c} B \\ \Delta \\ \underline{P_1} \end{array} \quad \begin{array}{c} N \\ \Delta \\ \underline{P_2} \end{array} \quad \begin{array}{c} B \\ \Delta \\ \underline{P_3} \end{array} \quad \left| \quad \begin{array}{c} N \\ \Delta \\ \underline{P_4} \end{array}$$