

Correctif du travail donné le 26/05/20

P°212.

6 Résous les équations suivantes.

$\frac{3x}{5} = 12$ $\frac{3x}{5} \cdot 5 = 12 \cdot 5$ $3x = 60$ $3x : 3 = 60 : 3$ $x = 20$	$\frac{-2x}{7} = -6$ $\frac{-2x}{7} \cdot 7 = -6 \cdot 7$ $-2x = -42$ $-2x : (-2) = -42 : (-2)$ $x = 21$	$-7 = \frac{3x}{2}$ $-7 \cdot 2 = \frac{3x}{2} \cdot 2$ $-14 = 3x$ $-14 : 3 = 3x : 3$ $\frac{-14}{3} = x$
$\frac{2x}{5} = \frac{3}{7}$ $\frac{2x}{5} \cdot 5 = \frac{3}{7} \cdot 5$ $2x = \frac{15}{7}$ $2x : 2 = \frac{15}{7} : 2$ $x = \frac{15}{14}$	$\frac{-x}{3} = \frac{7}{2}$ $\frac{-x}{3} \cdot 3 = \frac{7}{2} \cdot 3$ $-x = \frac{21}{2}$ $-x : (-1) = \frac{21}{2} : (-1)$ $x = \frac{-21}{2}$	$\frac{-5}{7}x = \frac{-10}{3}$ $\frac{-5x}{7} \cdot 7 = \frac{-10}{3} \cdot 7$ $-5x = \frac{-70}{3}$ $-5x : (-5) = \frac{-70}{3} : (-5)$ $x = \frac{14}{3}$

P°221

<p>1 a) $x - 3 = 5$ $x = 5 + 3$ $x = 8$</p>	<p>b) $7 = x + 9$ $7 - 9 = x$ $-2 = x$</p>	<p>c) $-2 + x = 0$ $x = 0 + 2$ $x = 2$</p>	<p>d) $x - \frac{1}{2} = 3$ $x = 3 + \frac{1}{2}$ $x = \frac{7}{2}$</p>	<p>e) $\frac{1}{5} = x - \frac{1}{3}$ $\frac{1}{5} + \frac{1}{3} = x$ $\frac{8}{15} = x$</p>
<p>$5 + x = -4$ $x = -4 - 5$ $x = -9$</p>	<p>$-4 = -2 + x$ $-4 + 2 = x$ $-2 = x$</p>	<p>$x - 2 = -8$ $x = -8 + 2$ $x = -6$</p>	<p>$2 + x = \frac{3}{5}$ $x = \frac{3}{5} - 2$ $x = \frac{-7}{5}$</p>	<p>$\frac{-3}{7} + x = \frac{-3}{4}$ $x = \frac{-3}{4} + \frac{3}{7}$ $x = \frac{-9}{28}$</p>

2 a) $3x = -12$ $x = -12 : 3$ $x = -4$	b) $-2 = 6x$ $-2 : 6 = x$ $\frac{-1}{3} = x$	c) $\frac{x}{3} = -5$ $x = -5 \cdot 3$ $x = -15$	d) $\frac{4x}{3} = 5$ $4x = 15$ $x = \frac{15}{4}$	e) $\frac{3}{2}x = 7$ $3x = 14$ $x = \frac{14}{3}$
$2x = 18$ $x = 18 : 2$ $x = 9$	$4x = -9$ $x = -9 : 4$ $x = \frac{-9}{4}$	$3x = \frac{2}{5}$ $x = \frac{2}{5} : 3$ $x = \frac{2}{15}$	$\frac{-2x}{3} = -4$ $-2x = -12$ $x = 6$	$\frac{-5x}{7} = \frac{1}{3}$ $-5x = \frac{7}{3}$ $x = \frac{-7}{15}$
$4x = -16$ $x = -16 : 4$ $x = -4$	$5x = 0$ $x = 0 : 5$ $x = 0$	$4 = \frac{x}{3}$ $4 \cdot 3 = x$ $12 = x$	$\frac{2x}{5} = \frac{3}{4}$ $2x = \frac{15}{4}$ $x = \frac{15}{8}$	$\frac{7}{3} = \frac{-5x}{3}$ $7 = -5x$ $\frac{-7}{5} = x$
$-5x = -35$ $x = -35 : (-5)$ $x = 7$	$1 = -7x$ $1 : (-7) = x$ $\frac{-1}{7} = x$	$\frac{x}{5} = \frac{3}{4}$ $x = \frac{3}{4} \cdot 5$ $x = \frac{15}{4}$	$-4 = \frac{5x}{3}$ $-12 = 5x$ $\frac{-12}{5} = x$	$\frac{5}{3}x = \frac{3}{4}$ $5x = \frac{9}{4}$ $x = \frac{9}{20}$
$-15 = 3x$ $-15 : 3 = x$ $-5 = x$	$-3x = -14$ $x = -14 : (-3)$ $x = \frac{14}{3}$	$\frac{-3}{2} = \frac{x}{7}$ $\frac{-3}{2} \cdot 7 = x$ $\frac{-21}{2} = x$	$\frac{-3x}{4} = 2$ $-3x = 8$ $x = \frac{-8}{3}$	$\frac{-2}{5} = \frac{3}{8}x$ $\frac{-16}{5} = 3x$ $\frac{-16}{15} = x$

3

$$\begin{aligned} \text{a) } 3x + 2 &= 5 \\ 3x &= 3 \\ x &= 1 \end{aligned}$$

$$\begin{aligned} \text{b) } -3x + 2 &= 8 \\ -3x &= 6 \\ x &= -2 \end{aligned}$$

$$\begin{aligned} \text{c) } 2x + \frac{1}{2} &= 3 \\ 2x &= \frac{5}{2} \\ x &= \frac{5}{4} \end{aligned}$$

$$\begin{aligned} \text{d) } \frac{x}{2} + \frac{1}{3} &= \frac{3}{5} \\ \frac{x}{2} &= \frac{4}{15} \\ x &= \frac{8}{15} \end{aligned}$$

$$\begin{aligned} 2x - 5 &= 13 \\ 2x &= 18 \\ x &= 9 \end{aligned}$$

$$\begin{aligned} 5 - 2x &= 2 \\ -2x &= -3 \\ x &= \frac{3}{2} \end{aligned}$$

$$\begin{aligned} \frac{x}{4} + 2 &= \frac{1}{2} \\ \frac{x}{4} &= \frac{-3}{2} \\ x &= -6 \end{aligned}$$

$$\begin{aligned} \frac{-1}{5} &= \frac{-2}{3} + \frac{x}{4} \\ \frac{7}{15} &= \frac{x}{4} \\ \frac{28}{15} &= x \end{aligned}$$

$$\begin{aligned} -4 &= 5x + 16 \\ -20 &= 5x \\ -4 &= x \end{aligned}$$

$$\begin{aligned} -4 + 3x &= -5 \\ 3x &= -1 \\ x &= \frac{-1}{3} \end{aligned}$$

$$\begin{aligned} -4x - \frac{3}{5} &= 3 \\ -4x &= \frac{18}{5} \\ x &= \frac{-9}{10} \end{aligned}$$

$$\begin{aligned} \frac{2x}{5} + \frac{3}{4} &= \frac{1}{2} \\ \frac{2x}{5} &= \frac{-1}{4} \\ x &= \frac{-5}{8} \end{aligned}$$

$$\begin{aligned} 7 &= 2x + 9 \\ -2 &= 2x \\ -1 &= x \end{aligned}$$

$$\begin{aligned} 2x + 4 &= 0 \\ -2x &= -4 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} -3 &= 3 + \frac{x}{3} \\ -6 &= \frac{x}{3} \\ -18 &= x \end{aligned}$$

$$\begin{aligned} \frac{3}{7} - \frac{2x}{5} &= \frac{1}{3} \\ \frac{-2x}{5} &= \frac{-2}{21} \\ x &= \frac{5}{21} \end{aligned}$$

$$\begin{aligned} -4x - 5 &= 3 \\ -4x &= 8 \\ x &= -2 \end{aligned}$$

$$\begin{aligned} 0 &= -4 + 3x \\ 4 &= 3x \\ \frac{4}{3} &= x \end{aligned}$$

$$\begin{aligned} \frac{x}{7} - 7 &= 7 \\ \frac{x}{7} &= 14 \\ x &= 98 \end{aligned}$$

$$\begin{aligned} \frac{3x}{2} + 2 &= -3 \\ \frac{3x}{2} &= -5 \\ x &= \frac{-10}{3} \end{aligned}$$

4

$$\begin{aligned} \text{a) } x - 7 &= -4 \\ x &= -4 + 7 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \text{b) } -2x &= 3 \\ x &= 3 : (-2) \\ x &= \frac{-3}{2} \end{aligned}$$

$$\begin{aligned} \text{c) } -1 &= 1 - 2x \\ -2 &= -2x \\ 1 &= x \end{aligned}$$

$$\begin{aligned} \text{d) } 5 - 4x &= 5 \\ -4x &= 0 \\ x &= 0 \end{aligned}$$

$$\begin{aligned} 3x &= -24 \\ x &= -24 : 3 \\ x &= -8 \end{aligned}$$

$$\begin{aligned} -8 &= 7 - x \\ -15 &= -x \\ 15 &= x \end{aligned}$$

$$\begin{aligned} -2x &= 1 \\ x &= 1 : (-2) \\ x &= \frac{-1}{2} \end{aligned}$$

$$\begin{aligned} -7 &= 2 - 3x \\ -9 &= -3x \\ 3 &= x \end{aligned}$$

$$\begin{aligned} \frac{x}{5} &= -4 \\ x &= -4 \cdot 5 \\ x &= -20 \end{aligned}$$

$$\begin{aligned} 2x &= \frac{3}{7} \\ x &= \frac{3}{7} : 2 \\ x &= \frac{3}{14} \end{aligned}$$

$$\begin{aligned} x - \frac{3}{2} &= 1 \\ x &= 1 + \frac{3}{2} \\ x &= \frac{5}{2} \end{aligned}$$

$$\begin{aligned} -\frac{1}{3} + 2x &= -1 \\ 2x &= \frac{-2}{3} \\ x &= \frac{-1}{3} \end{aligned}$$

$-2x = \frac{2}{5}$ $x = \frac{2}{5} : (-2)$ $x = \frac{-1}{5}$	$5 = \frac{-x}{3}$ $5 \cdot 3 = -x$ $-15 = x$	$\frac{x}{2} + 5 = -3$ $\frac{x}{2} = -8$ $x = -16$	$2 - x = \frac{1}{5}$ $-x = \frac{-9}{5}$ $x = \frac{9}{5}$
$10 = -5x$ $10 : (-5) = x$ $-2 = x$	$6 - 2x = 0$ $-2x = -6$ $x = 3$	$5 = -3x - 4$ $9 = -3x$ $-3 = x$	$3x + 4 = -2$ $3x = -6$ $x = -2$

5 a) $3x - 2 = 5x + 8$ $-10 = 2x$ $-5 = x$	b) $3 - 2x + x = 4 - 3x + 5x + 2$ $3 - x = 6 + 2x$ $-3 = 3x$ $-1 = x$	c) $\frac{x}{3} + \frac{x}{2} = -10$ $\frac{5x}{6} = -10$ $5x = -60$ $x = -12$
$-2 + 4x = x - 10$ $3x = -8$ $x = \frac{-8}{3}$	$4x - 2 + 5x - 2x = 2x + 8$ $7x - 2 = 2x + 8$ $5x = 10$ $x = 2$	$5x + \frac{5}{3} = 2x - \frac{1}{2}$ $3x = \frac{-13}{6}$ $x = \frac{-13}{18}$
$2x - 5 = 10x - 2$ $-3 = 8x$ $\frac{-3}{8} = x$	$2x - 10 - 12x + 6 = 20x + 20 - 2$ $-10x - 4 = 20x + 18$ $-22 = 30x$ $\frac{-11}{15} = x$	$\frac{x}{2} + 3 = \frac{x}{3} - 2$ $\frac{x}{6} = -5$ $x = -30$
$3x - 5 = 1 + 6x$ $-6 = 3x$ $-2 = x$	$3x - 12 + 5x = 7x - 8 - x$ $8x - 12 = 6x - 8$ $2x = 4$ $x = 2$	$\frac{1}{2} + \frac{x}{3} = \frac{-3}{5} + \frac{x}{2}$ $\frac{11}{10} = \frac{x}{6}$ $\frac{33}{5} = x$
$-3 + 8x = 5 - 2x$ $10x = 8$ $x = \frac{4}{5}$	$24x - 24 - 7x - 12 = 13x - 8$ $17x - 36 = 13x - 8$ $4x = 28$ $x = 7$	$\frac{2x}{5} + \frac{1}{3} = \frac{2}{5} - \frac{3x}{2}$ $\frac{19x}{10} = \frac{1}{15}$ $x = \frac{2}{57}$