Inequations SOL

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ANSWER KEY
INEQUATIONS (9)

Résous les inéquations suivantes. Représente la solution à l'aide d'une droite numérique.

$\frac{x}{-5} < 4(5-2x)$ $\times(-5)$

$>$

$x > -20(5-2x)$

$x > -100 + 40x$

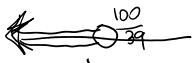
$+100 \quad +100$

$100 + x > 40x$

$-x \quad -x$

$100 > 39x$

$x < \frac{100}{39}$

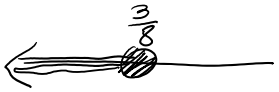


$3(5-2x) \leq 6(4-5x)$

$15 - 6x \leq 24 - 30x$

$24x \leq 9$

$x \leq \frac{9}{24} = \frac{3}{8}$



$6x - 5(6-x) \geq \frac{2x-1}{-2}$ $\times(-2)$

$\leq$

$-12x + 10(6-x) \leq 2x - 1$

$-22x + 60 \leq 2x - 1$

$61 \leq 24x$

$x \geq \frac{61}{24}$

$8 - \frac{x+5}{5} \leq -3(1-3x)$ $\times 5$

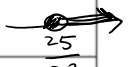
$40 - (x+5) \leq -15(1-3x)$

$40 - x - 5 \leq -15 + 45x$

$35 - x \leq -15 + 45x$

$+15 + x \quad +15 + x$

$50 \leq 46x$, $x \geq \frac{50}{46} = \frac{25}{23}$



$\frac{2(x-3)}{-5} < 9 - 2x$ $\times(-5)$

$>$

$2(x-3) > -45 + 10x$

$2x - 6 > -45 + 10x$

$39 > 8x$

$x < \frac{39}{8}$

~~$2(x+5) \frac{x-1}{2} > 3 - 4(3-x)$ $\times 2$~~

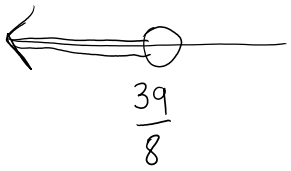
$\left(\frac{4(x-3)}{-7} \geq 1 - 5x\right)$ $\times(-7)$

$4(x-3) \leq -7 + 35x$

$4x - 12 \leq -7 + 35x$

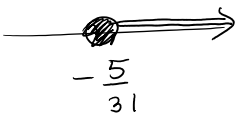
$-4x \quad +7 \quad +7 \quad -4x$

$x < \frac{39}{8}$



$-5 \leq 31x$

$x \geq -\frac{5}{31}$



$\left(-2(x-5)-\frac{x-1}{2}>3-4(3-x)\right)\times 2$

$-4(x-5)-(x-1)>6-8(3-x)$

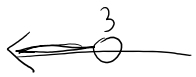
$-4x+20-x+1>6-24+8x$

$-5x+21>-18+8x$

$+5x \quad +18 \quad +18 \quad +5x$

$39>13x$

$3>x$



$\left(2-4(x+1)-\frac{x-3}{5}\geq x-5(6+x)\right)\times 5$

$10-20(x+1)-(x-3)\geq 5x-25(6+x)$

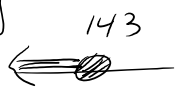
$10-20x-20-x+3\geq 5x-150-25x$

$-21x-7\geq -20x-150$

$+20x \quad +20x$

$-x\geq -143$

$x\leq 143$



$\left(\frac{x+2}{5}-\frac{4x-3}{4}\leq 2x-3(1+x)\right)\times 20$

$4(x+2)-5(4x-3)\leq 40x-60(1+x)$

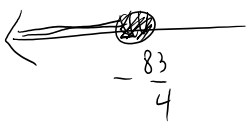
$4x+8-20x+15\leq 40x-60-60x$

$-16x+23\leq -20x-60$

$+20x \quad +20x$

$4x\leq -83$

$x\leq -\frac{83}{4}$



$\left(\frac{5-2x}{2}-\frac{x-3}{6}\leq x-\frac{7x+5}{3}\right)\times 6$

$3(5-2x)-(x-3)\leq 6x-2(7x+5)$

$15-6x-x+3\leq 6x-14x-10$

$18-7x\leq -8x-10$

$+8x \quad +8x$

$x\leq -28$