2) $8x + 6x - 12 \geq 42 + 16x$

$8x + 6x - 16x \geq 42 + 12$

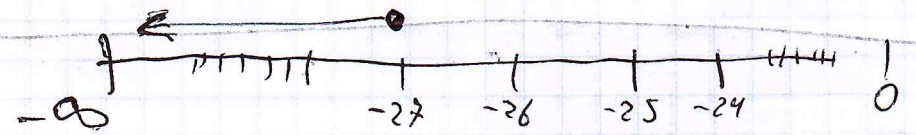
$-2x \geq 54 \ (-1)$

$2x \leq -54$

$x \leq \frac{-54}{2}$

$x \leq -27$

$(-\infty, 27]$



3) $-6 < \frac{3}{7}(2 - 3x) \leq 12$

$-6 < \frac{3(2-3x)}{7} \leq 12$

$-6 < \frac{6}{7} - \frac{9}{7}x \leq 12 \quad \left(-\frac{6}{7}\right)$

$-\frac{6}{7} - 6 < \frac{6}{7} - \frac{9}{7}x - \frac{6}{7} \leq 12$

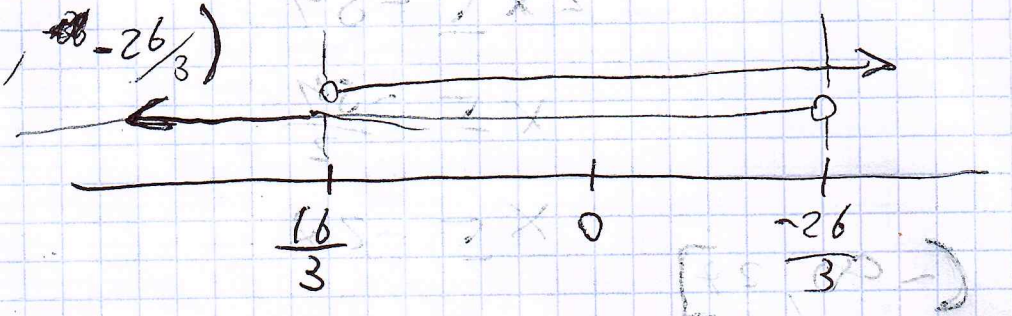
$\frac{48}{7} < -\frac{9}{7}x \leq \frac{78}{7}$

$$\frac{-48}{7} \quad \frac{78}{7}$$

$$\frac{-9}{7} \quad \frac{-9}{7}$$

$$\frac{16}{3} > x > \frac{-26}{3}$$

$(16/3, -26/3)$



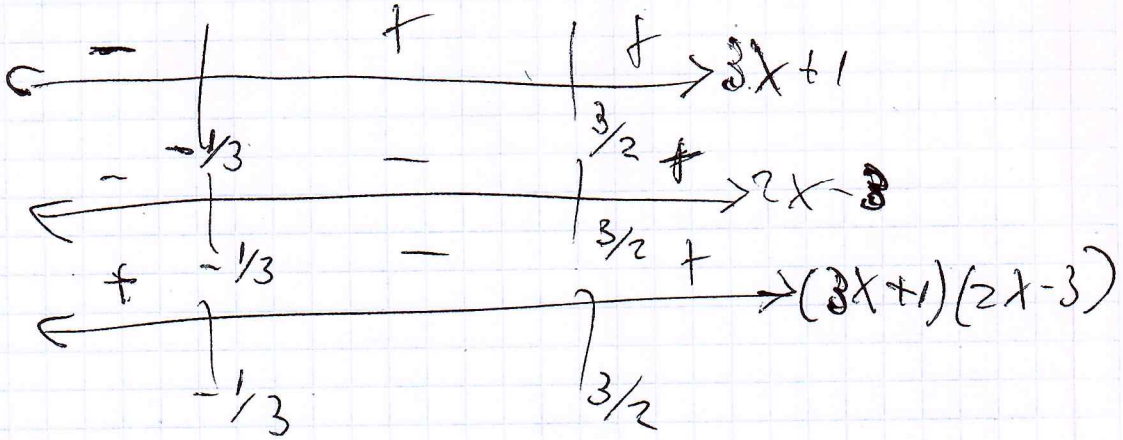
4) $6x^2 - 7x < 3$

$6x^2 - 7x - 3 < 0$

$(3x+1)(2x-3) < 0$

$3x+1=0$ $\quad$ $2x-3=0$

$x = -\frac{1}{3}$ $\quad$ $x = \frac{3}{2}$



$$\left(-\frac{1}{3}, \frac{3}{2}\right)$$