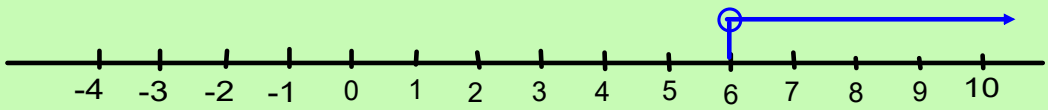
# Lineární nerovnice

20. 4. 2020

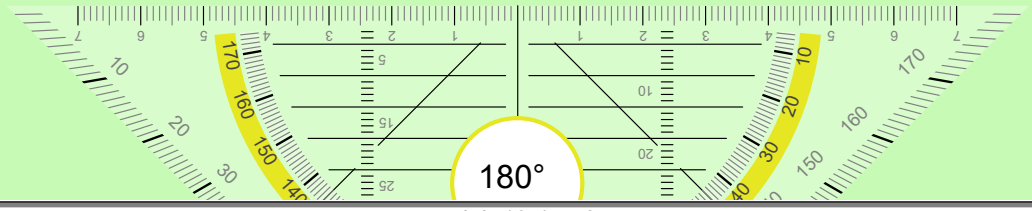
$x > 6$

zápis čteme: x je větší než 6




zapisujeme: $x \in (6; \infty)$

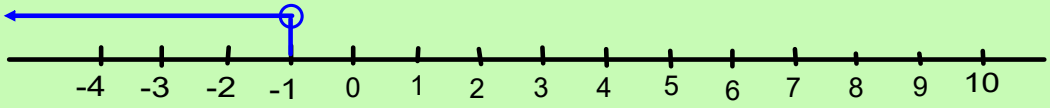
čteme: x náleží otevřenému intervalu 6; nekonečno




dub 19-17:56

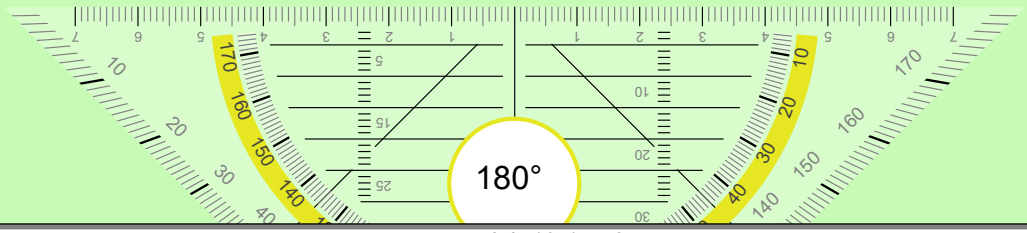
$x < -1$

zápis čteme: x je menší než - 1




zapisujeme: $x \in (-\infty; -1)$

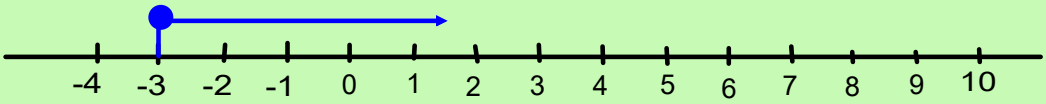
zápis čteme: x náleží otevřenému intervalu - ∞; -1




dub 19-17:56

$x - 3 \geq -6 \quad / + 3$

$x \geq -3$




zapisujeme: $x \in \langle -3; \infty)$

čteme: x náleží uzavřenému intervalu zleva

Zk: pro $x = 0$

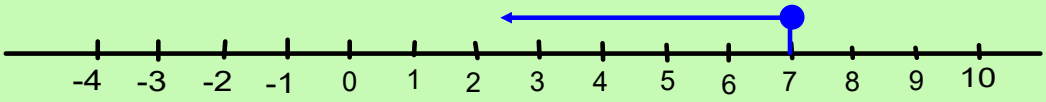
$L = 0 - 3 = -3$

$P = -6$ $\quad L > P$

dub 19-17:56

$x + 6 \leq 13 \quad / - 6$

$x \leq 7$




zápis čteme: x je menší nebo rovno 7

zapisujeme: $x \in (-\infty; 7 \rangle$

čteme: x náleží zprava uzavřenému intervalu $-\infty; 7$

Zk: pro $x = 2$

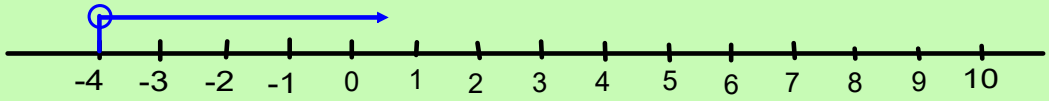
$L = 2 + 6 = 8$

$P = 13$ $\quad L < P$

dub 19-17:56

$1 + x > -3 \quad / -1$

$x > -4$




$x \in (-4; \infty)$

Zk: pro $x = -1$

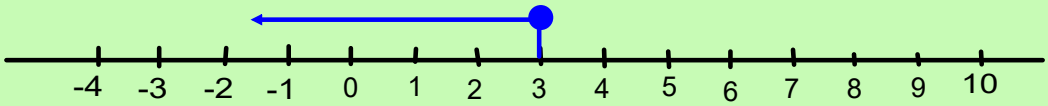
$L = 1 + (-1) = 0$

$P = -3 \qquad L > P$

dub 19-17:56

$x - 5 \leq -2 \quad / +5$

$x \leq 3$




$x \in (-\infty; 3\rangle$

Zk: pro $x = 2$

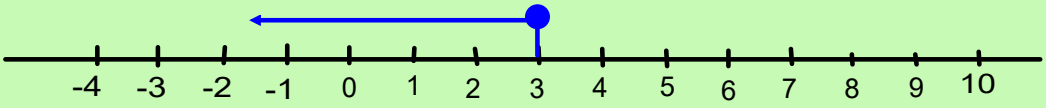
$L = 2 - 5 = -3$

$P = -2 \qquad L < P$

dub 19-17:56

$4 . x \leq 12 \quad / : 4$

$x \leq 3$




$x \in ( - \infty; 3 \rangle$

Zk: pro $x = - 1$

$L = 4 . ( -1) = - 4$

$P = 12 \qquad L < P$

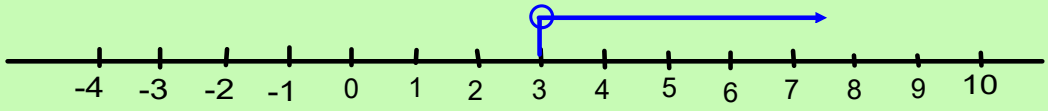
≥ > ○ <

dub 19-17:56

$- 2x - 3 < - 9 \quad / + 3$

$- 2x < - 6 \quad / : ( - 2)$

$x > 3$




$x \in ( 3 ; \infty)$

Zk: pro $x = 4$

$L = - 2 . 4 - 3 = - 8 - 3 = - 11$

$P = - 9 \qquad L < P$

pro $x = 1$

$L = - 2 . 1 - 3 = - 2 - 3 = - 5$

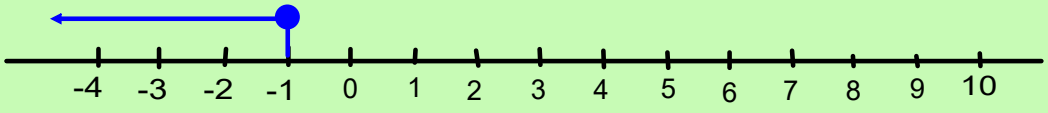
$P = - 9 \qquad L > P$

POZOR číslo není z daného intervalu !

● ≥ ○

dub 19-17:56

$$-3 \cdot (t + 4) \geq -10 - t$$
$$-3t - 12 \geq -10 - t$$
$$-3t + t \geq -10 + 12$$
$$-2t \geq 2 \quad / : (-2)$$
$$t \leq -1$$




$x \in (-\infty ; -1\rangle$

Zk: pro $x = -2$

$L = -3 \cdot (-2 + 4) = -3 \cdot 2 = -6$

$P = -2 - 8 = -10$

$L < P$

pro $x = -1$

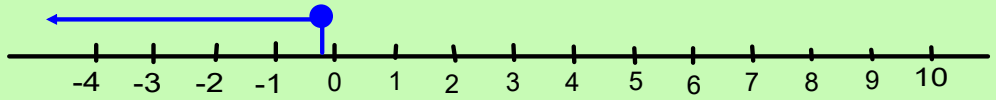
$L = -3 \cdot (-1 + 4) = -3 \cdot 3 = -9$

$P = -2 - 7 = -9$

$L = P$

dub 19-17:56

$$\frac{x}{2} + \frac{x}{3} \leq \frac{1}{3} - \frac{1}{2} \quad / \cdot 6$$
$$3x + 2x \leq 2 - 3$$
$$5x \leq -1 \quad / : 5$$
$$x \leq \frac{-1}{5}$$




$x \in (-\infty ; \frac{-1}{5}\rangle$

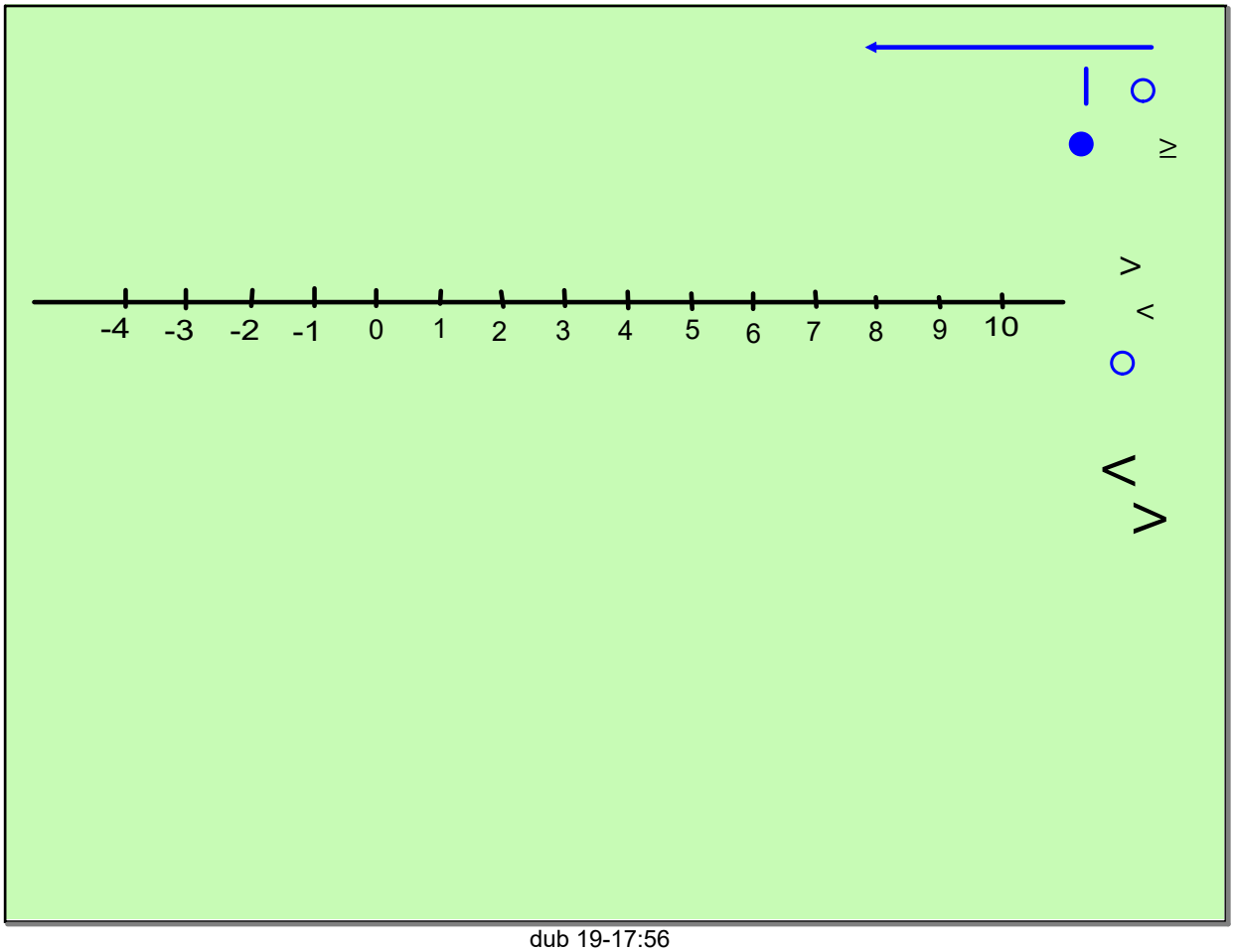
Zk: pro $x = -1$

$L = \frac{-1}{2} + \frac{-1}{3} = \frac{-3 - 2}{6} = \frac{-5}{6}$

$P = \frac{1}{3} - \frac{1}{2} = \frac{2 - 3}{6} = \frac{-1}{6}$

$L < P$

dub 19-17:56




dub 19-17:56