

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

1) Dziedzina:

$$1) 2x-3 \neq 0$$

$$2x+3 \div 2$$

$$x \neq \frac{3}{2}$$

$$2) 6x-5 \neq 0$$

$$6x+5 \div 6$$

$$x \neq \frac{5}{6}$$

$$1) x \in \mathbb{R} - \left\{ \frac{3}{2}, \frac{5}{6} \right\}$$

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

$$(x+1)(6x-5) = (2x-3)(3x+1)$$

$$\cancel{6}x^2 - 5x + 6x - 5 = \cancel{6}x^2 + 2x - 9x - 3$$

$$-5x + 6x - 2x + 9x = -3 + 5$$

$$8x = 2 \quad \div 8$$

$$x = \frac{2}{8}$$

$$x = \frac{1}{4} \in \mathbb{D}$$