

2.5.12

10.01.22

$$j) \frac{x+3}{3x-1} + \frac{1}{4} = \frac{2x-9}{4-12x} + 1$$

$$\frac{x+3}{3x-1} + \frac{1}{4} = \frac{2x-9}{4(1-3x)} + 1$$

1) Déterminons les zéros des dénominateurs :

$$\bullet 3x-1 = 0$$

$$3x = 1$$

$$x = \frac{1}{3}$$

$$ED = \mathbb{R} - \left\{ \frac{1}{3} \right\}$$

2) dc: $4(3x-1)$ car $4(1-3x) = -4(3x-1)$

$$\frac{x+3}{3x-1} + \frac{1}{4} = \frac{2x-9}{4(3x-1)} + 1 \quad \left| \cdot 4(3x-1) \right.$$

$$4(x+3) + (3x-1) = -(2x-9) + 4(3x-1)$$

$$4x + 12 + 3x - 1 = -2x + 9 + 12x - 4$$

$$7x + 11 = 10x + 5$$

$$-3x = -6$$

$$x = 2 \in ED$$

$$S = \{ 2 \}$$

CL

CL

$$-10x - 11$$

$$\div (-3)$$

2.5, 12

$$g) \frac{t}{t-2} - \frac{2}{t+2} = \frac{8}{t^2-4}$$

① Recherche de ED:

$$t - 2 = 0$$

$$t = 2$$

$$\left\{ \begin{array}{l} t + 2 = 0 \\ t = -2 \end{array} \right\}$$

$$t^2 - 4 = 0$$

$$(t-2)(t+2) = 0$$

$$\downarrow \\ t = 2$$

$$\downarrow \\ t = -2$$

$$ED = \mathbb{R} - \{2; -2\}$$

② dc: $(t-2)(t+2)$