Feuille d'exercices $n°0$

Fractions

Lycée Gustave Eiffel.

Exercice 1. ♪ *Take it easy*

Résoudre les équations suivantes :

1) $1 = \dfrac{1-x}{2-x}$,

2) $2 - x = -x - \dfrac{x-2}{-1-x}$,

3) $\dfrac{2}{-1+x} = \dfrac{-1}{x-5}$,

4) $\dfrac{x}{5} - 6x + 4 = \dfrac{2x-1}{6}$,

5) $x^2 - 169 = 1 - \dfrac{x}{13}$,

6) $\dfrac{2x-1}{x} - 5 + \dfrac{1}{x} = 0$,

7) $\dfrac{5-3x}{1-x} = \dfrac{-2}{x-1}$,

8) $-2 + 6x = \dfrac{6x^2 - 4x - 2}{2+x}$,

9) $\dfrac{-5x+3}{1-x} = x - \dfrac{3}{5}$,

10) $1 = \dfrac{-2x-4}{8x-4}$.

Exercice 2. ♩ *Encore !*

Résoudre les équations suivantes :

1) $\dfrac{\frac{x+1}{x-1}}{-x+2} = 0$,

2) $\dfrac{x+1}{\frac{x-1}{-x+2}} = 0$,

3) $\dfrac{x-2}{x-2} = 1$,

4) $\dfrac{x-2}{x-2} = -1$,

5) $\dfrac{x-2}{x-2} = 0$,

6) $\dfrac{\frac{2x+1}{-1+5x}}{\frac{1-3x}{-2-7x}} = 0$.

Solutions des exercices

Exercice 1.

1) $S = \emptyset$.
2) $S = \{-4\}$.
3) $S = \{\frac{11}{3}\}$.
4) $S = \{\frac{115}{184}\}$.
5) $S = \{\frac{-170}{13}, 13\}$.
6) $S = \emptyset$.
7) $S = \emptyset$.
8) $S = \{\frac{1}{7}\}$.
9) $S = \{\frac{3}{5}, 6\}$.
10) $S = \{0\}$.

Exercice 2.

1) $S = \{-1\}$.
2) $S = \{-1\}$.
3) $S = \mathbb{R}\backslash\{2\}$.
4) $S = \emptyset$.
5) $S = \emptyset$.
6) $S = \{\frac{-1}{2}\}$.