

Chapitre 6 : Equation
Savoir faire 1 : Résoudre une équation

**Exercice 1 :**

Résoudre les équations suivantes.

$$\begin{array}{l}
 \text{1. } 4x + 2 = x + 11 \\
 4x + 2 = x + 11 \\
 \begin{array}{c}
 (-x) \\
 (-2) \\
 \div 3
 \end{array} \quad \begin{array}{c}
 (-x) \\
 (-2) \\
 \div 3
 \end{array} \\
 3x + 2 = 11 \\
 3x = 9 \\
 x = 3
 \end{array}$$

A toi de jouer tout seul pour la suite.

$$\begin{array}{l}
 \text{2. } 3x + 1 = 7 \\
 3x + 1 = 7 \\
 \begin{array}{c}
 (-1) \\
 \div 3
 \end{array} \quad \begin{array}{c}
 (-1) \\
 \div 3
 \end{array} \\
 3x = 6 \\
 x = 2
 \end{array}$$

$$\begin{array}{l}
 \text{3. } 5x - 1 = 7x + 1 \\
 5x - 1 = 7x + 1 \\
 \begin{array}{c}
 (-7x) \\
 (+1) \\
 \div (-2)
 \end{array} \quad \begin{array}{c}
 (-7x) \\
 (+1) \\
 \div (-2)
 \end{array} \\
 -2x - 1 = +1 \\
 -2x = 2 \\
 x = -1
 \end{array}$$

Exercice 2 :

$$\begin{array}{l}
 \text{1. } x - 5 = 15 \\
 x - 5 = 15 \\
 \begin{array}{c}
 (+5)
 \end{array} \quad \begin{array}{c}
 (+5)
 \end{array} \\
 x = 20
 \end{array}$$

$$\begin{array}{l}
 \text{2. } 3x - 7 = 23 \\
 3x - 7 = 23 \\
 \begin{array}{c}
 (+7) \\
 \div 3
 \end{array} \quad \begin{array}{c}
 (+7) \\
 \div 3
 \end{array} \\
 3x = 30 \\
 x = 10
 \end{array}$$

$$\begin{array}{l}
 \text{3. } 4x - 7 = 2x + 13 \\
 4x - 7 = 2x + 13 \\
 \begin{array}{c}
 (+7) \\
 (-2x) \\
 \div 2
 \end{array} \quad \begin{array}{c}
 (+7) \\
 (-2x) \\
 \div 2
 \end{array} \\
 4x = 2x + 20 \\
 2x = 20 \\
 x = 10
 \end{array}$$

$$\begin{array}{l}
 \text{4. } 5x - 8 = 3x \\
 5x - 8 = 3x \\
 \begin{array}{c}
 (-3x) \\
 (+8) \\
 \div 2
 \end{array} \quad \begin{array}{c}
 (-3x) \\
 (+8) \\
 \div 2
 \end{array} \\
 2x - 8 = 0 \\
 2x = 8 \\
 x = 4
 \end{array}$$

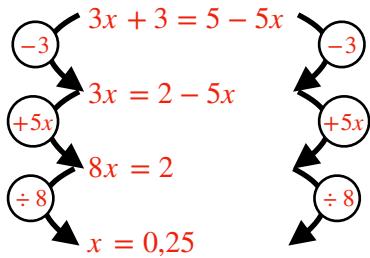
$$\begin{array}{l}
 \text{5. } -6x + 3 = 3x + 15 \\
 -6x + 3 = 3x + 15 \\
 \begin{array}{c}
 (-3x) \\
 (+8) \\
 \div 2
 \end{array} \quad \begin{array}{c}
 (-3x) \\
 (-3) \\
 \div (-9)
 \end{array} \\
 -9x + 3 = 15 \\
 -9x = 12 \\
 x = -\frac{4}{3}
 \end{array}$$

$$\begin{array}{l}
 \text{6. } -7x + 8 = -4x + 12 \\
 -7x + 8 = -4x + 12 \\
 \begin{array}{c}
 (-8) \\
 (+4x) \\
 \div (-3)
 \end{array} \quad \begin{array}{c}
 (-8) \\
 (+4x) \\
 \div (-3)
 \end{array} \\
 -7x = -4x + 4 \\
 -3x = +4 \\
 x = -\frac{4}{3}
 \end{array}$$

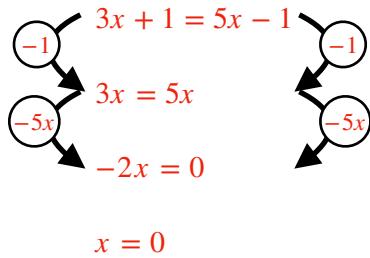
Exercice 3 :

Résoudre les équations suivantes.

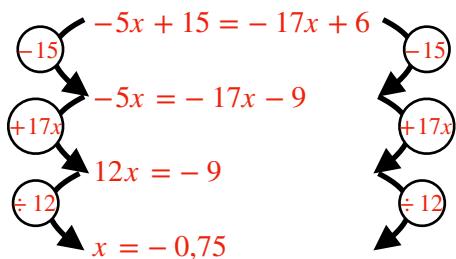
$$1. \quad 3x + 3 = 5 - 5x$$



$$2. \quad 3x + 1 = 5x - 1$$



$$3. \quad -5x + 15 = -17x + 6$$



$$4. \quad 3x + 2 = 5x + 1$$

