

Correction IE n° 11

(E1)

$$16x + 22 = 62$$

$$16x + \cancel{22} - \cancel{22} = 62 - 22$$

$$16x = 40$$

$$\frac{16x}{16} = \frac{40}{16}$$

$$\boxed{x = 2,5}$$

$$x \xrightarrow{\times 16} 16x$$
$$\xleftarrow{:16}$$

La solution de l'équation est 2,5.

ou (plus rapide)

$$16x + 22 = 62$$

$$16x = 62 - 22$$

$$16x = 40$$

$$x = \frac{40}{16}$$

$$\boxed{x = 2,5}$$

(E2)

$$14x + 6 = (9x) + 18$$

$$\underline{14x - 9x} + 6 = \cancel{9x} - \cancel{9x} + 18$$

$$5x + (6) = 18$$

$$5x + \cancel{6} - \cancel{6} = 18 - 6$$

$$5x = 12$$

$$\frac{\cancel{5}x}{\cancel{5}} = \frac{12}{5}$$

$$\boxed{x = 2,4}$$

$$x \xrightarrow{\times 5} 12$$

:5

La solution de l'équation est 2,4.

ou

$$14x + (6) = (9x) + 18$$

$$14x - \cancel{9x} = 18 - 6$$

$$5x = 12$$

$$x = \frac{12}{5}$$

$$x = 2,4$$

(E3)

$$13x - 11 = 9x + 33$$

$$13x - 9x - 11 = \cancel{9x} - \cancel{9x} + 33$$

$$4x - 11 = 33$$

$$4x - \cancel{11} + \cancel{11} = 33 + 11$$

$$4x = 44$$

$$x \xrightarrow{\times 4} 4x$$

$$\frac{4x}{4} = \frac{44}{4}$$

$$\boxed{x = 11}$$

La solution de l'équation est 11.

ou

$$13x - 11 = 9x + 33$$

$$13x - 9x = 33 + 11$$

$$4x = 44$$

$$x = \frac{44}{4}$$

$$x = 11$$

$$(E4) \quad 8(3x-4) = -6x+7$$

(On commence par développer le membre de gauche.)

$$24x - 32 = -6x + 7$$

$$24x + 6x - 32 = -6x + 6x + 7$$

$$30x - 32 = 7$$

$$30x - \cancel{32} + \cancel{32} = 7 + 32$$

$$30x = 39$$

$$\frac{30x}{30} = \frac{39}{30}$$

$$\boxed{x = 1,3}$$

La solution de l'équation est 1,3.

$$\begin{array}{ccc} x & \xrightarrow{\times 30} & 30x \\ & \xleftarrow{:30} & \end{array}$$

$$\underline{\underline{ou}} \quad 8(3x-4) = -6x+7$$

$$24x - 32 = -6x + 7$$

$$24x + 6x = 7 + 32$$

$$30x = 39$$

$$x = \frac{39}{30}$$

$$\boxed{x = 1,3}$$