

Equations du type $ax + b = cx + d$

CORRECTION

1) Résoudre les équations suivantes

a) $14x + 4 = 13x + 7$ $14x - 13x = 7 - 4$ $x = 3$	b) $7x + 15 = 4x + 60$ $7x - 4x = 60 - 15$ $3x = 45$ $x = 15$	c) $5x + 12 = x + 2$ $5x - x = 2 - 12$ $4x = -10$ $x = -2,5$
d) $6a - 17 = 3a + 22$ $6a - 3a = 22 + 17$ $3a = 39$ $a = 13$	e) $5y - 23 = 3y + 12$ $5y - 3y = 12 + 23$ $2y = 35$ $y = 17,5$	f) $11b - 6 = 5b + 30$ $11b - 5b = 30 + 6$ $6b = 36$ $b = 6$
g) $6a - 17 = -4a + 23$ $6a + 4a = 17 + 23$ $10a = 40$ $a = 4$	h) $3y - 19 = -5y - 3$ $3y + 5y = 19 - 3$ $8y = 16$ $y = 2$	i) $7b - 31 = -5b - 7$ $7b + 5b = 31 - 7$ $12b = 24$ $b = 2$

2) Même exercice :

a) $5x + 4 = -12x + 6$ $5x + 12x + 4 = 6$ $17x = 6 - 4$ $17x = 2$ $x = \frac{-2}{17}$	b) $-7y + 18 = -10y + 42$ $-7y + 10y + 18 = 42$ $3y = 42 - 18$ $3y = 24$ $y = 8$	c) $-8y + 34 = -11y + 35$ $-8y + 11y + 34 = 35$ $3y = 35 - 34$ $3y = 1$ $y = \frac{1}{3}$
d) $-5a + 30 = -12a + 25$ $-5a + 12a = 25 - 30$ $7a = -5$ $a = \frac{-5}{7}$	e) $9x + 27 = -2x + 37$ $9x + 2x = 37 - 27$ $11x = 10$ $x = \frac{10}{11}$	f) $-12b + 3 = -2b + 9$ $-12b + 2b = 9 - 3$ $-10b = 6$ $b = \frac{6}{-10} = \frac{-3}{5}$