

Equations se ramenant à une équation du type $ax + b = cx + d$

CORRECTION

Résoudre les équations suivantes

a) $4(3x + 2) = 6x + 20$ $12x + 8 = 6x + 20$ $12x - 6x = 20 - 8$ $6x = 12$ $x = 2$	b) $2(x + 1) = -(x + 2)$ $2x + 2 = -x - 2$ $2x + x = -2 - 2$ $3x = -4$ $x = \frac{-4}{3}$
c) $-12y - (-14y - 6) = 3y + 19$ $-12y + 14y + 6 = 3y + 19$ $2y - 3y = 19 - 6$ $-y = 13$ $y = -13$	d) $-2(a + 8) + 18 = -7a + 2$ $-2a - 16 + 18 = -7a + 2$ $-2a + 7a + 2 = 2$ $5a = 0$ $a = 0$
e) $-6(x + 7) + 66 = 102 - 10(x + 7)$ $-6x - 42 + 66 = 102 - 10x - 70$ $-6x + 24 = -10x + 32$ $-6x + 10x = 32 - 24$ $4x = 8$ $x = 2$	f) $10x + 33 = (x + 11)(x + 1) - x^2 + 16$ $10x + 33 = x^2 + 11x + x + 11 - x^2 + 16$ $10x + 33 = 12x + 27$ $10x - 12x = 27 - 33$ $-2x = -6$ $x = 3$
g) $4x - (-5x - 33) = (x + 9)(x + 1) - x^2 + 2$ $4x + 5x + 33 = x^2 + 9x + x + 9 - x^2 + 2$ $9x + 33 = 10x + 11$ $-x = -22$ $x = 22$	h) $(2x + 7)(3x - 4) = x(6x - 9)$ $6x^2 - 8x + 21x - 28 = 6x^2 - 9x$ $6x^2 - 6x^2 + 13x + 9x = 28$ $22x = 28$ $x = \frac{28}{22} = \frac{14}{11}$