

Résoudre algébriquement les équations suivantes :

(a) $4x - 3 = -10x + 4$

(b) $3 - 5x = 10 - 12x$

(c) $5(x - 3) - (1 - 2x) = 3 + 4x$

(d) $-7 + 2(x - 3) - 3 = 3(x - 1) - 2(x + 1)$

(e) $3(x - 2) - (1 - 2x) = 5x - (3x - 2) - 1$

(f) $(2x - 4)(1 - 3x) = (x + 7)(5 - 6x)$

(g) $\frac{2}{3}x - \frac{1}{5} = -2x + \frac{3}{5}$

(h) $\frac{10}{7}x - 1 = \frac{7}{3}x$

(i) $\frac{1}{4} - \frac{1}{3}x = \frac{1}{2}x + \frac{1}{5}$

(j) $\frac{5}{3} - \frac{5}{2}x = \frac{1}{5} - \frac{2}{5}x$

(k) $\frac{2}{5}x - 7 = 4 - \frac{1}{3}x$

(l) $\frac{2}{5} + \frac{1}{4}x = 3 + x$

(m) $\frac{2}{9}(3x + 1) = 2 - (\frac{1}{4}x + \frac{1}{3})$

(n) $5 - \frac{2}{3}(-4x - 1) + \frac{1}{2}x = 2x - \frac{3}{4} - 3(1 - \frac{5}{2}x)$

(o) $\frac{x-2}{3} - \frac{12-x}{2} = \frac{5x-36}{4} - 1$

(p) $\frac{2x+1}{3} - \frac{x-2}{4} - \frac{2x-3}{12} = 0$

(q) $\frac{5x-2}{3} - \frac{2x-1}{4} = \frac{4x+6}{16}$

(r) $\frac{1+2x}{6} - \frac{3x-1}{4} = \frac{5}{3} - \frac{1}{8}(2x + 8)$

(s) $\frac{1-3x}{12} - \frac{2}{9}(x - 1) = \frac{7}{4} - \frac{2x+5}{6}$

(t) $-3 - \frac{3x-1}{6} - \frac{1}{3}(x - \frac{4-3x}{4}) = -\frac{7}{3}$

Solutions. (a) $\{\frac{7}{4}\}$ (b) $\{\frac{7}{7}\}$ (c) $\{\frac{8}{11}\}$ (d) $\{\frac{1}{2}\}$ (e) $\{\frac{1}{2}\}$ (f) $\{\frac{1}{2}\}$ (g) $\{\frac{1}{2}\}$ (h) $\{\frac{1}{2}\}$ (i) $\{\frac{1}{2}\}$ (j) $\{\frac{1}{2}\}$ (k) $\{\frac{1}{2}\}$ (l) $\{\frac{1}{2}\}$ (m) $\{\frac{1}{2}\}$ (n) $\{\frac{1}{2}\}$ (o) $\{\frac{1}{2}\}$ (p) $\{\frac{1}{2}\}$ (q) $\{\frac{1}{2}\}$ (r) $\{\frac{1}{2}\}$ (s) $\{\frac{1}{2}\}$ (t) $\{\frac{1}{2}\}$