

DESPEJAR VARIABLES

$$1) 5A - B + 3C = D$$

$$3C = D - 5A + B$$

$$C = \frac{D - 5A + B}{3}$$

$$3) -4A + 9B = 2 - 3C$$

$$-4A = 2 - 3C - 9B$$

$$A = \frac{2 - 3C - 9B}{-4}$$

$$A = -\frac{2 - 3C - 9B}{4}$$

$$5) 9A - 3B + 5 = AC - 4$$

$$9A - AC = -4 + 3B - 5$$

$$(9 - C)A = -9 + 3B$$

$$A = \frac{-9 + 3B}{9 - C}$$

$$7) \frac{3AB}{C} = 2D^2$$

$$3AB = 2CD^2$$

$$A = \frac{2CD^2}{3B}$$

$$7.2) \frac{3AB}{C} = 2D^2$$

$$D^2 = \frac{3AB}{2C}$$

$$D = \pm \sqrt{\frac{3AB}{2C}}$$

$$8) \frac{4A}{B} + 2 = C$$

$$\frac{4A}{B} = C - 2$$

$$4A = B \cdot (C - 2)$$

$$A = \frac{B(C - 2)}{4}$$

$$2) 10A - 7B = 2C - D$$

$$10A - 7B + D = 2C$$

$$C = \frac{10A - 7B + D}{2}$$

$$4) 2A - BC = 4 + D$$

$$-BC = 4 + D - 2A$$

$$B = -\frac{4 + D - 2A}{C}$$

$$6) A + 4B^2 = 1$$

$$4B^2 = 1 - A$$

$$B^2 = \frac{1 - A}{4}$$

$$B = \pm \sqrt{\frac{1 - A}{4}} = \pm \frac{\sqrt{1 - A}}{2}$$

$$8.2) \frac{4A}{B} + 2 = C$$

$$\frac{4A}{B} = C - 2$$

$$4A = B \cdot (C - 2)$$

$$B = \frac{4A}{C - 2}$$

$$9) A+B=H-5K$$

$$A+B-H=-5K$$

$$\frac{A+B-H}{-5} = K$$

$$K = -\frac{A+B-H}{5}$$

$$11) A = P + rtP$$

$$A = (1+rt)P$$

$$P = \frac{A}{1+rt}$$

$$13) PV = nRT$$

$$V = \frac{nRT}{P}$$

$$R = \frac{PV}{nT}$$

$$10) F = ma$$

$$a = \frac{F}{m}$$

$$12) x = z + vt$$

$$x - vt = z$$

$$z = x - vt$$

$$x - z = vt$$

$$t = \frac{x-z}{v}$$

$$14) Q = mc(A-B)$$

$$c = \frac{Q}{m(A-B)}$$

$$Q = mcA - mcB$$

$$Q + mcB = mcA$$

$$A = \frac{Q + mcB}{mc}$$

$$15) A = 2lw + 2hw + 2he$$

$$A - 2hw = 2lw + 2he$$

$$A - 2hw = e(2w + 2h)$$

$$e = \frac{A - 2hw}{2w + 2h}$$

$$16) V = \pi r^2 h$$

$$h = \frac{V}{\pi r^2}$$

$$\frac{V}{\pi h} = r^2$$

$$r = \pm \sqrt{\frac{V}{\pi h}}$$

$$17) 2ab = c^2 - d^2$$

$$a = \frac{c^2 - d^2}{2b}$$

$$2ab + d^2 = c^2$$

$$c = \pm \sqrt{2ab + d^2}$$

$$18) v = \frac{d}{t}$$

$$vt = d$$

$$t = \frac{d}{v}$$

$$19) e = \frac{Q^2}{2v}$$

$$e \cdot 2v = Q^2$$

$$v = \frac{Q^2}{2e}$$

$$20) F = \frac{mv^2}{R}$$

$$FR = mv^2$$

$$R = \frac{mv^2}{F}$$

$$FR = mv^2$$

$$m = \frac{FR}{v^2}$$

$$FR = mv^2$$

$$v^2 = \frac{FR}{m}$$

$$v = \pm \sqrt{\frac{FR}{m}}$$

$$21) U = \frac{2K-L}{A}$$

$$UA = 2K - L$$

$$L = 2K - UA$$

$$22) \frac{2}{v} + w = 6$$

$$\frac{2}{v} = 6 - w$$

$$2 = v \cdot (6 - w)$$

$$v = \frac{2}{6 - w}$$

$$23) F = \frac{Kab}{r^2}$$

$$Fr^2 = Kab$$

$$b = \frac{Fr^2}{Ka}$$

$$24) a = \frac{b-c}{I}$$

$$aI = b - c$$

$$c = b - aI$$

$$25) c = \frac{5}{9} (F - 32)$$

$$c = \frac{5F}{9} - \frac{5 \cdot 32}{9}$$

$$c + \frac{160}{9} = \frac{5F}{9}$$

$$9\left(c + \frac{160}{9}\right) = 5F$$

$$9c + 160 = 5F$$

$$F = \frac{9c + 160}{5}$$

o también así:

$$9c = 5(F - 32)$$

$$\frac{9c}{5} = F - 32$$

$$\frac{9c}{5} - 32 = F$$

que se puede dejar así o ponerlo todo con denominador común:

$$F = \frac{9c - 160}{5}$$

$$26) A+B = \frac{3}{M}$$

$$(A+B)M = 3$$

$$M = \frac{3}{A+B}$$

$$28) Z = \frac{2(N-B)}{M}$$

$$ZM = 2(N-B)$$

$$\frac{ZM}{2} = N-B$$

$$B = N - \frac{ZM}{2}$$

$$30) d = b + \frac{at^2}{2}$$

$$d-b = \frac{at^2}{2}$$

$$2(d-b) = at^2$$

$$a = \frac{2(d-b)}{t^2}$$

$$27) B = \frac{2}{Z} - A$$

$$B+A = \frac{2}{Z}$$

$$Z(B+A) = 2$$

$$Z = \frac{2}{B+A}$$

$$29) L = \frac{KT}{2} - VA$$

$$L+VA = \frac{KT}{2}$$

$$2(L+VA) = KT$$

$$K = \frac{2(L+VA)}{T}$$

$$L - \frac{KT}{2} = -VA$$

$$\frac{L - \frac{KT}{2}}{-V} = A$$

$$A = \frac{2L - KT}{-2V}$$

$$A = \frac{KT - 2L}{2V}$$