

Literal equations

Step1. If necessary, simplify each side of the equation by combining like terms.

Step2. Isolate the indicated variable.

a) Use the opposite operation of addition or subtraction to move any constants or variables to the other side.

b) Use the opposite operation of multiplication or division to eliminate the coefficient.

Exercise 1.

Solve the following literal equations for x:

a. $ax + b = 0$

b. $cx + d = e$

c. $a(x + b) = c$

d. $ax + b = cx$

e. $\frac{x}{a} + \frac{x}{b} = 1$

f. $\frac{a}{x} + \frac{b}{x} = 1$

g. $ax - b = cx - d$

h. $\frac{ax+c}{b} = d$

i. $\frac{b}{ax+c} = d$