3.2 Solving Linear Equations: ax + b = c

Procedure for solving equations in the form ax + b = c:

1.

2.

3.

4.

Examples:

a) 5x + 3 − 2x = −18

b) x + 1.2x + 6.9 = −3.0

c) −26 = 2y − 14 − 4y

d) $\frac{1}{2}x+\frac{3}{4}x+\frac{7}{2}-\frac{2}{3}x=0$

e) $\frac{1}{4}x+\frac{3}{2}x+\frac{7}{8}-x=1$

f) $\frac{y}{7}+\frac{y}{28}+\frac{1}{2}=\frac{3}{4}$

g) A rectangular shaped parking lot is to have a perimeter of 450 yards. If the width must be 90 yards because of a building code, what will the length need to be? (P = 2l + 2w)

h) When purchasing an item on the installment plan, you find the total cost, C, by multiplying the monthly payment, p, by the number of months, t, and adding the product to the down payment, d. (C = pt + d) A refrigerator costs $857.60 if purchased on the installment plan. If the monthly payments are $42.50 and the down payment is $92.60, how long will it take to pay for the refrigerator?

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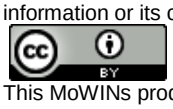

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