

1.3B Models & Applications

Learning Target:

- Solve a formula for a variable

Example 7:

Solve the formula $2l + 2w = P$ for l

$$2l + 2w = P$$

$$-2w = -2w$$

$$2l = P - 2w$$

$$\frac{2l}{2} = \frac{P - 2w}{2}$$

$$l = \frac{P - 2w}{2}$$

1. Undo adding $2w$ by subtracting $2w$ from both sides

2. Undo multiplying by 2 divide by 2 on both sides

Your Turn 7:

Solve the formula $2l + 2x = P$ for w

$$2l + 2w = P$$

$$-2l = -2l$$

$$2w = P - 2l$$

$$\frac{2w}{2} = \frac{P - 2l}{2}$$

$$w = \frac{P - 2l}{2}$$

1. Undo adding $2l$ by subtracting $2l$ from both sides

2. Undo multiplying by 2 divide by 2 on both sides

Example 8:

Solve the formula $A = P + Prt$ for P

$$A = P + Prt$$

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

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

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

1. Factor out P

2. Undo multiplying by (1+rt) divide by (1+rt) on both sides

Your Turn 8:

Solve the formula $P = C + MC$ for C

$$P = C + MC$$

$$P = C(1 + M)$$

$$\frac{P}{(1 + M)} = \frac{C(1 + M)}{(1 + M)}$$

$$\frac{P}{(1 + M)} = C$$

1. Factor out C

2. Undo multiplying by (1+M) divide by (1+M) on both sides

1.3B

Pg 121 #61-79 odd