

2.1 One Step Equations

To solve an equation or formula, **isolate** the variable (unknown) by doing the **opposite**.

If a quantity is **added** to the variable, **subtract** that quantity from each side.

$$-15 + f = -1$$

$$\mathbf{15-15 +f = -1- (-15)} \qquad f = -1- \mathbf{(-15)}$$

$$0 + f = 14$$

$$f = 14$$

If a quantity is **subtracted** from the variable, **add** that quantity to each side.

$$p - 0.1 = 1.4$$

$$p - 0.1 + \mathbf{0.1} = 1.4 + \mathbf{0.1}$$

$$p = 1.4 + 0.1$$

$$p = 1.5$$

If a quantity is **multiplied** by the variable, **divide** each side by that quantity.

$$-60 = -12k$$

$$\frac{-60}{-12} = \frac{-12k}{-12}$$

$$5 = 1k$$

$$5 = k$$

If the variable is **divided** by a quantity, **multiply** each side by that quantity.

$$\frac{e}{13} = 4$$

$$\frac{e}{13} \times 13 = 4 \times 13$$

$$\frac{e}{1} = 52$$

$$e = 52$$

p 51 - 53 # 1 - 7
17 - 19