

Name: \_\_\_\_\_

Key

# Notes on Solving for a Variable

## 7<sup>th</sup> Grade Math

$$1. \quad m - 4n = 8 \quad \text{for } m$$

$$+4n \quad +4n$$

$$\boxed{m = 4n + 8}$$

$$2. \quad \frac{m}{n} = p - 6 \quad \text{for } n$$

$$n \cdot \frac{m}{n} = n(p - 6)$$

$$\frac{m}{(p-6)} = \frac{n(p-6)}{(p-6)}$$

$$n = \frac{m}{(p-6)}$$

$$3. \quad \frac{f+4}{g} = 6 \quad \text{for } f$$

$$g \cdot \frac{f+4}{g} = 6 \cdot g$$

$$f+4 = 6g$$

$$-4 \quad -4$$

$$\boxed{f = 6g - 4}$$

$$4. \quad \frac{8m}{b} = t \quad \text{for } m$$

$$b \cdot \frac{8m}{b} = b \cdot t$$

$$\frac{8m}{8} = \frac{bt}{8}$$

$$m = \frac{bt}{8}$$

$$5. \quad \frac{5-x}{z} = y \quad \text{for } z$$

$$z \cdot \frac{5-x}{z} = y \cdot z$$

$$\boxed{z = -x + 5}$$

$$6. \quad PV = nRT \quad \text{for } T$$

$$\frac{PV}{nR} = \frac{nRT}{nR}$$

$$\boxed{T = \frac{PV}{nR}}$$