

Literal Equations

Name _____

Level 1

Date _____ Period _____

Solve each equation for the indicated variable.

1) $u = \frac{a}{3}$, for a

$$\frac{u}{3} = a$$

2) $g = \frac{2}{3x}$, for x

$$3xg = \frac{2}{3g}$$

$$x = \frac{2}{3g}$$

Need x out of the denominator.

3) $z = 2a + z - 2b$, for a

$$z - 2 = 2a - 2b$$

$$z - 2 + 2b = 2a$$

$$\frac{z - 2 + 2b}{2} = a$$

$$a = \frac{z - 2 + 2b}{2}$$

4) $u = -6 - 2x - y$, for x

$$u + 6 = -2x - y$$

$$u + 6 + y = -2x$$

$$\frac{u + 6 + y}{-2} = \frac{-2x}{-2}$$

$$x = -\frac{u}{2} - 3 - \frac{y}{2}$$

5) $z = y + \frac{m}{x}$, for x

$$z - y = \frac{m}{x}$$

$$x(z - y) = m$$

$$\frac{x(z - y)}{(z - y)} = \frac{m}{(z - y)}$$

$$x = \frac{m}{(z - y)}$$

6) $u = y - kx$, for x

$$u - y = -kx$$

$$\frac{u - y}{-k} = \frac{-kx}{-k}$$

$$\frac{u - y}{-k} = x$$

7) $g = \frac{cdr}{x}$, for x

$$xg = \frac{cdr}{g}$$

$$x = \frac{cdr}{g}$$

8) $u = ka + vw$, for a

$$u - vw = ka$$

$$\frac{u - vw}{k} = a$$

$$a = \frac{u - vw}{k}$$