

Solving for x: Lesson 14

Literal Formulas 2: Worksheet 1

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

MATH 4 ALL

Solve the following equations for the letter provided:

$$A = \frac{1}{2}bh \text{ for } h: 2 \cdot A = 2 \cdot \frac{1}{2}bh$$

$$\frac{2A}{b} = \frac{bh}{b} \quad \left( \frac{2A}{b} = h \right)$$

$$V = lwh \text{ for } h:$$

$$\frac{V}{lw} = \frac{h}{1} \quad \left( h = \frac{V}{lw} \right)$$

$$3x + y = 7 \text{ for } y:$$

$$\frac{-3x}{-3x} \quad \frac{-y}{-3x}$$

$$y = 7 - 3x$$

$$gh + 7h = x \text{ for } h:$$

$$\frac{h(g+7)}{g+7} = \frac{x}{g+7} \quad \left( h = \frac{x}{g+7} \right)$$

$$x \cdot 11y = \frac{5+2x}{x} \text{ for } x:$$

$$\frac{11xy}{-2x} = \frac{5+2x}{-2x}$$

$$\frac{11xy - 2x}{-2x} = \frac{5}{-2x}$$

$$x(11y - 2) = 5$$

$$\frac{x(11y - 2)}{11y - 2} = \frac{5}{11y - 2} \quad \left( x = \frac{5}{11y - 2} \right)$$

$$3x - ax = 3 \text{ for } x:$$

$$\frac{x(3-a)}{3-a} = \frac{3}{3-a} \quad \left( x = \frac{3}{3-a} \right)$$

$$\frac{n}{m} \cdot \frac{m}{n} (x - 7) = \frac{r}{p} \cdot \frac{n}{m} \text{ for } x:$$

$$\frac{x-7}{1} = \frac{rn}{pm}$$

$$\frac{x-7}{+7} = \frac{rn}{pm} \quad \left( x = \frac{rn}{pm} + 7 \right)$$

$$9(x - 2) = 4(3x + y) \text{ for } x:$$

$$\frac{9x - 18}{-12x + 18} = \frac{12x + 4y}{-12x + 18}$$

$$\frac{-3x}{-3} = \frac{4y + 18}{-3} \quad \left( x = \frac{4y + 18}{-3} \right)$$

$$\frac{a-c}{x} = (3+m)x \text{ for } x:$$

$$\frac{a-c}{3+m} = \frac{(3+m)x}{3+m} \quad \left( x = \frac{a-c}{3+m} \right)$$

$$6xb + 4xy = 7m - x \text{ for } x:$$

$$\frac{6xb + 4xy + x}{6b + 4y + 1} = \frac{7m}{6b + 4y + 1}$$

$$\left( x = \frac{7m}{6b + 4y + 1} \right)$$