

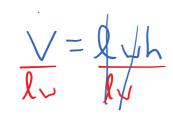
LESSON 4.3 LITERAL EQUATIONS

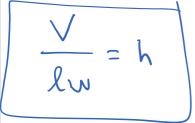
equations/inequalities in math and real world context and to write rules for arithmetic sequence.

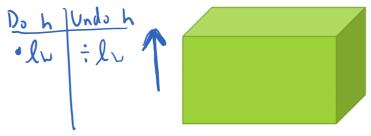
Obj: SWBAT solve literal equations.

PROBLEM 1:

To find the volume of a rectangular prism we use the formula V = lwh with length l, width w and height h. Solve the formula for h.



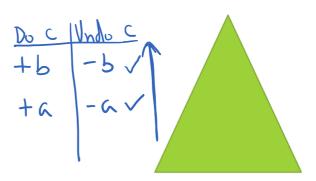




PROBLEM 2:

The formula for the perimeter P of a triangle with sides of length a, b, c is P = a + b + c. Solve for formula for c.

$$P-\alpha = b+c$$



PROBLEM 3:

The formula for the volume of a cylinder of radius r and height h is $V = \pi r^2 h$. Solve the formula for h.

$$\frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}} \frac{1}{\sqrt{2}}$$

$$\frac{\sqrt{11}r^2}{\sqrt{11}r^2} = h$$

PROBLEM 4:

$$ax - b = c$$
, Solve for x .

$$\frac{ax}{a} = \frac{c+b}{a}$$

$$x = \frac{c+b}{a}$$

PROBLEM 5:

$$y = mx + b$$
, Solve for m .

$$\gamma = mx + b$$

$$\frac{1-b}{x} = \frac{mx}{x}$$

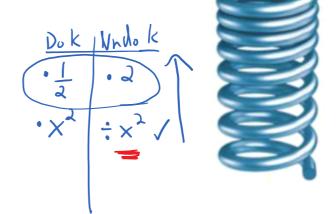
PROBLEM 6:

The formula $E = \frac{1}{2}kx^2$ is used to find the potential energy E of a springs with spring constant k that has been stretched by length x. Solve the formula for k.

$$E = \frac{1}{2} k x^{2}$$

$$R \cdot \frac{E}{x^2} = \sqrt{k^2}$$

$$\frac{2E}{x^2} = K$$



PROBLEM 8:

$$A = \frac{1}{3}bc$$
. Solve for b .

$$\frac{A = \frac{1}{3}b\chi}{c}$$

$$3.\frac{A}{C} = \frac{1}{3}b^{3}$$

$$\frac{3A}{C} = \frac{1}{3}b^{3}$$

PROBLEM 9:

$$V = \frac{lwh}{3}$$
. Solve for w.

PROBLEM 10:

Dean is painting a playground tunnel red. The Surface area formula for the tunnel is $S=2\pi r l$, where r is the radius, l is the length and S is the surface area. Solve the formula for $l. \,$

PROBLEM 11:

The formula for the surface area of a cylinder is $S=2\pi r^2+2\pi rh$. Rewrite the formula in terms of h.

PROBLEM 12:

Rewrite the formula for Density $D=\frac{m}{V}$ in terms of V.

PROBLEM 13:

$$a(x+b) = c$$
, where $a \neq 0$ for x

PROBLEM 14:

$$A = \frac{1}{2}h(b_1 + b_2)$$
 Solve for b_1