Solving Literal Equations and Formulas:

Given $D = rt$, solve for r.

We want to isolate the r still using inverse operations.

$$\frac{D}{t} = \frac{rt}{t}$$

t is being multiplied by r so to undo the multiplication we divided by t. *This causes it to* cancle from the right side of the equation.

Since D and t are variables they wont divide so we just leave them like this →

$$\frac{D}{t} = r \quad \text{or} \quad \boxed{r = \frac{D}{t}}$$

In other words...the rate is equal to the distance divided by the time

Examples

1) C = 2πr for r

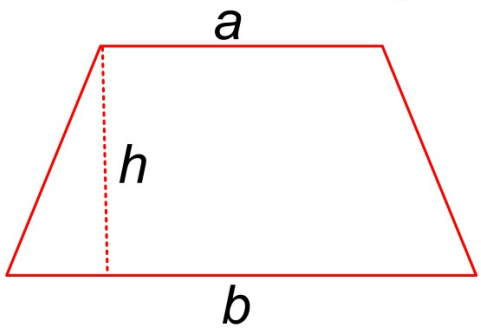
2) -5*a* + *y* = -54 for y

3) $9a - 2b = c + 4a$ for a

4) $\frac{5x + y}{a} = 2$ for a

3) The area of a trapezoid is found using the following formula.

$$A = \frac{1}{2}(a + b)h$$



a) Solve the formula for h.

b) What is the height of a trapezoid with an area of 60m^2 and bases of 8 meters and 12 meters?