Literal Equation

* An equation with two or more variables

* formula * $y = mx + b$

- Use inverse operations

Addition → Subtraction
Multiplication → Division
Square → Square Root

$x + 7 = -12$
$-7 \quad -7$
$x = -19$

$y - 9 = 34$
$+9 \quad +9$
$y = 43$

1. $\boxed{a} + b = c$
$-b \quad -b$
$a = -b + c$
$a = c - b$

2. $\boxed{d} - e = f$
$+e \quad +e$
$d = f + e$

$\frac{-6x}{-6} = \frac{-30}{-6}$
$x = 5$

$-4 \cdot \frac{y}{-4} = 8 \cdot -4$
$y = -32$

3. $\frac{C}{2\pi} = \frac{2\pi \boxed{r}}{2\pi}$
$\frac{C}{2\pi} = r$

4. $v \cdot D = \frac{\boxed{m}}{v} \cdot v$
$Dv = m$

2-step

5. $P = 2l + 2w$

$-2l \quad -2l$

$\frac{P-2l}{2} = \frac{2w}{2}$

$\frac{P-2l}{2} = w$

6. $2 \cdot A = \frac{1}{2} bh \cdot 2$

$\frac{2A}{h} = \frac{bh}{h}$

$\frac{2A}{h} = b$

7. $S = \pi r l + \pi r^2$

$-\pi r^2 \quad -\pi r^2$

$\frac{S-\pi r^2}{\pi r} = \frac{\pi r l}{\pi r}$

$\frac{S-\pi r^2}{\pi r} = l$

8. $m \cdot S = w + 10e$

$Sm = w + 10e$

$-10e \quad +10e$

$Sm + 10e = w$