

2-3) Formulas and Problems

No #s, but it works the same way.

$$2x + 4 = 6$$
$$\quad -4 \quad -4$$

$$\underline{2}x = \underline{2}$$

$$\underline{x} = \underline{1}$$

(Ex 1) $V = lwh$ for h

Do the inverse (opposite) of the operations around "h".

$$V = l \cdot w \cdot h$$

multiplication
so divide to get "h"
by itself.

$$\frac{V}{lw} = \frac{\cancel{lw}h}{\cancel{lw}}$$

$$\frac{V}{lw} = h$$

Ex 2 $3y - 2x = 7$ for y

Think $3y - 2 = 7$

$$\begin{array}{r} 3y - 2x = 7 \\ \quad +2x \quad +2x \end{array}$$

$$3y = 2x + 7$$

Finish:

Ex 3 $A = \frac{1}{2} (B + b) h$ for b

$A = 2x$, you divide by 2 so
the coefficient of $x = 1$

How do you make $\frac{1}{2} = 1$?

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

$$\begin{pmatrix} 2 \\ -1 \end{pmatrix} A = \begin{pmatrix} 2 \\ -1 \end{pmatrix} \frac{1}{2} (B+b) h$$

$$2A = (B+b) h$$

