

A2T HW on Solving Literal Equations

Name: Ky

I. Solve the following for the indicated variable:

1. $a(y+1) = b$ solve for y $\boxed{y = \frac{b}{a} - 1 = \frac{b-a}{a}}$

2. $cx + f = b$ solve for x $\boxed{x = \frac{b-f}{c}}$

3. $Ax + By = C$ solve for A $\boxed{A = \frac{C - By}{x}}$

4. $V = \frac{1}{3}\pi r^2 h$ solve for h $\boxed{h = \frac{3V}{\pi r^2}}$

5. $A = \frac{1}{2}h(b_1 + b_2)$ solve for b_2 $\boxed{b_2 = \frac{2A - hb_1}{h}}$

6. $\frac{k}{4} = \frac{a-b}{3j}$ solve for j $\boxed{j = \frac{4a-4b}{3k}}$

OR $\boxed{b_2 = \frac{2A}{h} - b_1}$

II. Review. Solve the following:

7. $\frac{3}{4}x - 8 = \frac{1}{4}x + 9$ $\boxed{34}$

8. $\frac{x-2}{6} = \frac{x}{2}$ $\boxed{-1}$

9. $4(x-2) = 4x$ $\boxed{\emptyset}$

10. $3(1+x) - 5 = 3x - 2$ $\boxed{\mathbb{R}}$

11. $-3(x-5) + 4 = 4 - 2(x-1)$ $\boxed{13}$