**Literal Equations Review Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

A literal equation is an equation that contains multiple variables.

* The goal of a literal equation is to isolate a particular variable (not always x)!

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| 1. Solve for a.$$ax+b=c$$ | 2. Solve for w. $$V=lwh$$ | 3. Solve for b. $$A=\frac{y+b}{2}$$ |
| 4. Solve for x. (combine like terms first)$$3x+5x-7y=z$$ | 5. Solve for w.$$CD=\frac{12s}{w}$$ | 6. Solve for t. $$\frac{t}{5}-4r=25$$ |

7. The formula for a person’s typing speed is  *,where s* is speed in words per minute, *w* is number of words typed, *e* is number of errors, and *m* is number of minutes typing.

a. Solve for *e.*

b. **Using your formula from part a**, find the number of errors when you type 500 words for 10 minutes at a speed of 40 words per minute.

8. The formula $I=Prt$ can be used to determine the interest $I$ that is earned on a principal amount of money $P$, when the money is invested at an annual percentage rate $r$ for $t$ years.

a. Solve the formula $I=Prt$ for $t$.

b. If a couple invests $5000 in an account that earns a 3% interest rate, how long will they need to invest it to earn $1200 in interest? (Hint: Convert the interest rate to a decimal.)



 9. Solve for *a*