

# Variables, pt.3

## Solving Unknowns

Solve these unknowns involving mixed operations.

Ex.  $12a - 9 = 135$

$$\begin{array}{r} 12a - 9 = 135 \\ \quad +9 \quad +9 \\ \hline 12a = 144 \\ a = 12 \end{array}$$

Ex.  $9\odot + 10 = 91$

$$\begin{array}{r} 9\odot + 10 = 91 \\ \quad -10 \quad -10 \\ \hline 9\odot = 81 \\ \odot = 9 \end{array}$$

Problems: Solve for the unknown.

1.)  $12f + 6 = 30$ ,  $f = ?$

2.)  $12\heartsuit + 5 = 113$ ,  $\heartsuit = ?$

3.)  $3\odot + 7 = 28$ ,  $\odot = ?$

4.)  $5^* + 5 = 35$ ,  $^* = ?$

5.)  $7x + 2 = 23$ ,  $x = ?$

6.)  $4y - 4 = 12$ ,  $y = ?$

7.)  $2z - 9 = 15$ ,  $z = ?$

8.)  $11b - 6 = 27$ ,  $b = ?$

9.)  $3\beta - 5 = 25$ ,  $\beta = ?$

10.)  $6k - 4 = 26$ ,  $k = ?$