

SOLVING AN EQUATION MEANS FINDING A VALUE FOR THE VARIABLE - you can do this by following the "GOLDEN RULE FOR EQUATIONS" WHICH IS: "WHATEVER YOU DO TO ONE SIDE OF THE EQUATION YOU HAVE TO DO TO THE OTHER." AS LONG AS YOU FOLLOW THE GOLDEN RULE FOR EQUATIONS YOU CAN ADD, SUBTRACT, MULTIPLY OR DIVIDE WHATEVER YOU NEED TO UNTIL YOU GET YOUR VARIABLE ON ONE SIDE OF THE EQUATION AND A NUMBER ON THE OTHER SIDE.

EXAMPLE:  $4 + X = 12$       SUBTRACT 4 FROM EACH SIDE

$$\begin{array}{r} 4 + X = 12 \\ -4 \quad -4 \\ \hline 0 + X = 8 \end{array}$$

$0 + X = 8$

$X = 8$

you would NOT normally show the "0", it is just here for the example.

← ANSWER

SOLVE FOR X, Remember the GOLDEN RULE OF EQUATIONS

①  $9 + X = 21$

②  $X - 10 = 19$

③  $\frac{4X}{4} = \frac{12}{4}$

EXAMPLE

$X = 3$

EXAMPLE OF DIVIDING BOTH SIDES BY 4 TO SOLVE

④  $10 - 2 + X = 14$

⑤  $15 + X = 25$

⑥  $2X = 18$

⑦  $-12 + X = 10$

⑧  $24 + X = 41$

⑨  $6X = 36$