

Solving One-Step +/- Equations

- Equation - mathematical sentence that contains an = sign
- Solution - value for a variable that makes an equation true (answer)
- Inverse Operation - operations that "UNDO" each other
 ↓
 opposite

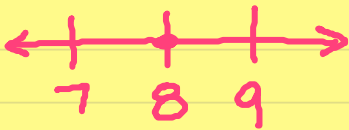
**** 5 STEP PROCESS - MUST USE**

*** Each step must be correct (exactly the way done in notes)**

Solve and graph the solution.

(Side for steps)

1) $t + 12 = 20$
2) $-12 = -12$
3) $t = 8$ → solution
4) ✓ $8 + 12 = 20$
5) $20 = 20$



(use 3 #s)

Don't forget arrows & dot

(side for work)

$$\begin{array}{r} 20 \\ -12 \\ \hline 8 \end{array} \qquad \begin{array}{r} 8 \\ +12 \\ \hline 20 \end{array}$$

1st copy equation, # steps + put = sign
Go to side w/variable + find operation

2nd UNDO the operation (subtract 12 from BOTH sides → Do the math now.

3rd Variable is alone. (GOOD) Other side is only a # bec. is the solution. (Box)
4th Check. Substitute solution into original equation.

5th REALLY do the math !!

Graph SOLUTION in box

2) 1) $b - 6 = 42$
 2) $+6 = +6$
 3) $b = 48$
 4) $\sqrt{48 - 6} = 42$
 5) $42 = 42$

42	48
$\frac{+6}{48}$	$\frac{-6}{42}$

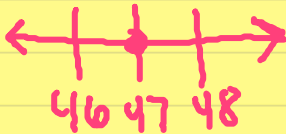


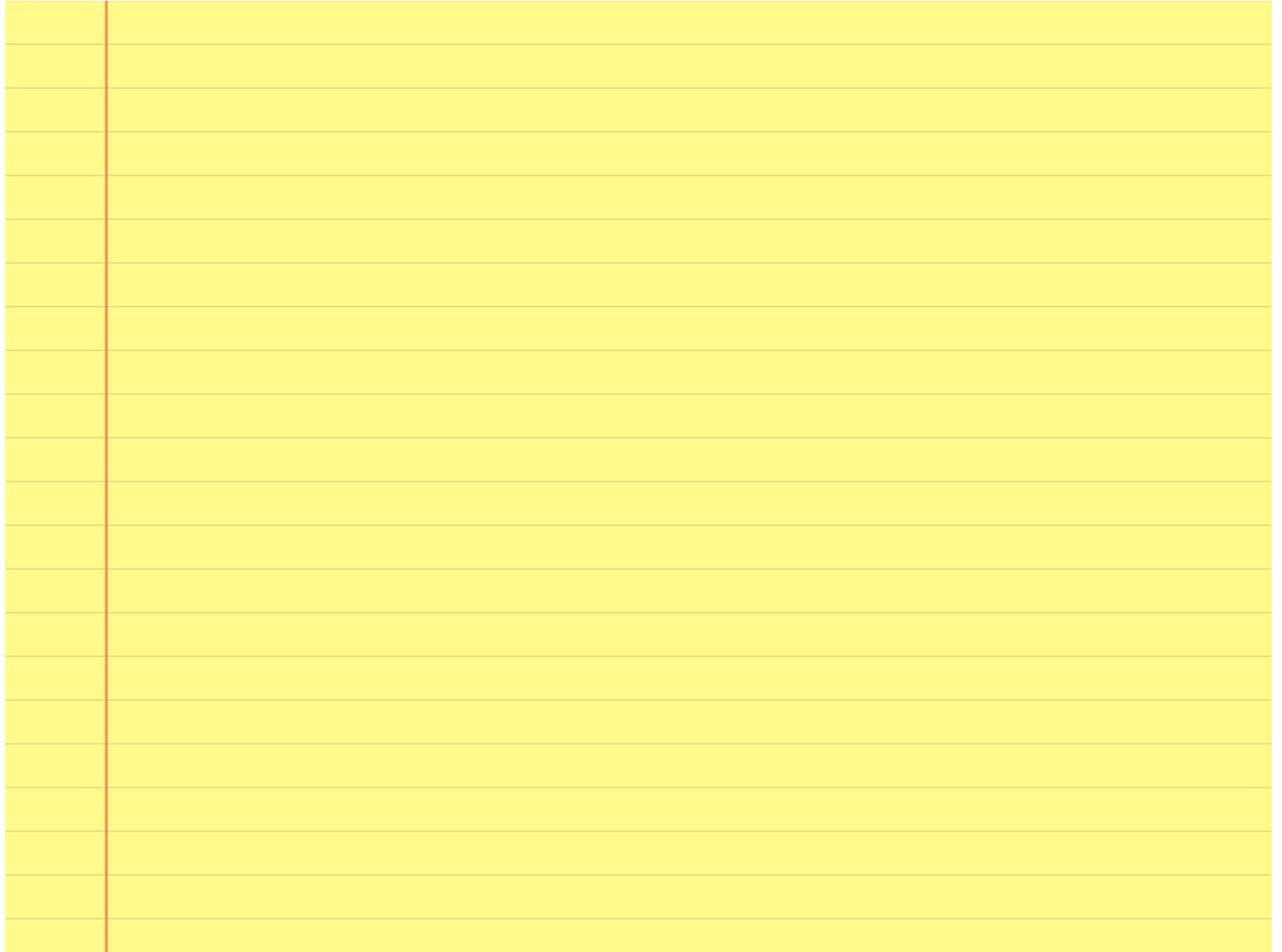
~~42~~

IS NOT
 SOLUTION - DON'T
 Graph!!

3) 1) $40 = r - 7$
 2) $+7 = +7$
 3) $47 = r$
 4) $\sqrt{40} = 47 - 7$
 5) $40 = 40$

40	47
$\frac{+7}{47}$	$\frac{-7}{40}$





$$\begin{aligned}
 4) \quad & 1) \quad 54 = 16 + c \\
 & 2) \quad -16 = -16 \\
 & 3) \quad \boxed{38 = c} \\
 & 4) \quad \checkmark \quad 54 = 16 + 38 \\
 & 5) \quad 54 = 54
 \end{aligned}$$



$$\begin{array}{r}
 54 \\
 -16 \\
 \hline
 38
 \end{array}
 \qquad
 \begin{array}{r}
 16 \\
 +38 \\
 \hline
 54
 \end{array}$$

$$\begin{aligned}
 5) \quad & 1) \quad 13 + a = 23 \\
 & 2) \quad -13 = -13 \\
 & 3) \quad \boxed{a = 10} \\
 & 4) \quad \checkmark \quad 13 + 10 = 23 \\
 & 5) \quad 23 = 23
 \end{aligned}$$



$$\begin{array}{r}
 23 \\
 -13 \\
 \hline
 10
 \end{array}$$

