Rewrite equation into Slope-Intercept Form Cue Card – with examples

GOAL: Get equation into Slope-Intercept Form: y = mx + b

General Rules:		
Step 1:	**Is there an x-term or constant on the same side as y?**	
	Yes; use inverse operations to undo the x-term or constant & go to Step 2 "NO"	No; Move to step 2
Step 2:	**Is the equation arranged in the general format of "y = mx + b"?**	
	Yes; Move to step 3	No; Arrange the terms to be in the general form "y = mx+b" (KEEP THE COEFFICIENT and/or SIGN IN FRONT WITH THE TERM)
Step 3:	**Does y have a coefficient of POSITIVE 1?**	
	Yes; you are done rearranging	No; Divide all terms by the coefficient and rewrite. (**Keep as a fraction and simplify** or for real world problem a decimal up to 2 places to right)

Examples:

Ex 1.

Step 1: Is there an x-term or constant on the same side as y?
- ✖ Yes; Use inverse operations to undo/go to S2 "NO"
- ___ No; Move to step 2

Step 2: Is the equation arranged in the general format of "y = mx + b"?
- ___ Yes; Move to step 3
- ✖ No; Arrange the terms to be in the general form "y = mx+b" **(KEEP THE SIGN IN FRONT WITH THE TERM)**

Step 3: Does y have a coefficient of positive 1?
- ✖ Yes; You are done rearranging
- ___ No; Divide all terms by the coefficient and rewrite.

$$-3 + y = 6x$$
$$+3 \qquad +3$$

y = 6x + 3

Ex 2.

Step 1: Is there an x-term or constant on the same side as y?
- ___ Yes; Use inverse operations to undo/go to S2 "NO"
- ✖ No; Move to step 2

Step 2: Is the equation arranged in the general format of "y = mx + b"?
- ✖ Yes; Move to step 3
- ___ No; Arrange the terms to be in the form "y = mx+b" **(KEEP THE SIGN IN FRONT WITH THE TERM)**

Step 3: Does y have a coefficient of positive 1?
- ___ Yes; You are done rearranging
- ✖ No; Divide all terms by the coefficient and rewrite.

$$-y = -4x + 4$$
$$-1 \qquad -1 \qquad -1$$

$y = 4x - 4$

Ex 3.

Step 1: Is there an x-term or constant on the same side as y? __X__ Yes; Use inverse operations to undo/go to S2 "NO" ___ No; Move to step 2	$-12 = -3x + 2y$ $+3x \quad +3x$ --- $2y = 3x - 12$ --- $2 \quad 2 \quad 2$ $y = \frac{3}{2}x - 6$
Step 2: Is the equation arranged in the general format of "y = mx + b"? ___ Yes; Move to step 3 __X__ No; Arrange the terms to be in the form "y = mx+b" **(KEEP THE SIGN IN FRONT WITH THE TERM)**	
Step 3: Does y have a coefficient of positive 1? ___ Yes; You are done rearranging __X__ No; Divide all terms by the coefficient and rewrite. (**Keep as a fraction and simplify** or for real world problem a decimal up to 2 places to right)	

Ex 4.

Step 1: Is there an x-term or constant on the same side as y? ___ Yes; Use inverse operations to undo/go to S2 "NO" __X__ No; Move to step 2	$-2y = 2 - 4x$ $-2y = -4x + 2$ --- $-2 \quad -2 \quad -2$ $y = 2x - 1$
Step 2: Is the equation arranged in the general format of "y = mx + b"? ___ Yes; Move to step 3 __X__ No; Arrange the terms to be in the form "y = mx+b" **(KEEP THE SIGN IN FRONT WITH THE TERM)**	
Step 3: Does y have a coefficient of positive 1? ___ Yes; You are done rearranging __X__ No; Divide all terms by the coefficient and rewrite. (**Keep as a fraction and simplify** or for real world problem a decimal up to 2 places to right)	

Ex 5: You may need to distribute or combine like terms before starting to rearrange.

Step 1: Is there an x-term or constant on the same side as y? __X__ Yes; Use inverse operations to undo/go to S2 "NO" ___ No; Move to step 2	$y - 2 = 7(x - 10)$ **Distribute** $y - 2 = 7x - 70$ $+2 \quad +2$ --- $y = 7x - 68$
Step 2: Is the equation arranged in the general format of "y = mx + b"? __X__ Yes; Move to step 3 ___ No; Arrange the terms to be in the form "y = mx+b" **(KEEP THE SIGN IN FRONT WITH THE TERM)**	
Step 3: Does y have a coefficient of positive 1? __X__ Yes; You are done rearranging ___ No; Divide all terms by the coefficient and rewrite. (**Keep as a fraction and simplify** or for real world problem a decimal up to 2 places to right)	