Names (group) _____ Date _____

Linear Equations and Inequalities: Practice and Check

PART 1 Group game: Find the pair

1. Cut out the 24 cards and put them face down.
2. Players take turns to turn over two cards. If one shows an equation, inequality or system and the other its solution, the player keeps the pair and shows the working.
3. If it is not a pair, the cards go back. The player with the most pairs wins.

$2x + 3 = 11$	$x = -1$ or $x = 5$	$x - 1 \leq 3$	$(-2, 1)$
$x = 5$	$4(x + 1) = 4x + 4$	$[-2, 2]$	$x + y = 5$ $x - y = 1$
$x = 6$	$-2x < 6$	$(-2, 2]$	$x = 4$
$2x + 1 = 2x + 5$	$(-\infty, 4]$	$(3, 2)$	$3(x - 1) = x + 7$
$\varnothing$	$\lvert x \rvert \leq 2$	$\frac{x}{3} + 1 = 3$	$\mathbb{R}$
$-1 < x + 1 \leq 3$	$\lvert x - 2 \rvert = 3$	$(-3, +\infty)$	$(x - 1)(x + 2) < 0$

Name _____ Date _____

PART 2 Check

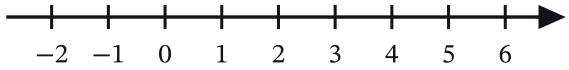
1 ON YOUR OWN Solve.

$5x - 3 = 2x + 9 \rightarrow x =$ ☐

$\frac{x+1}{2} - \frac{x}{3} = 2 \rightarrow x =$ ☐

2 ON YOUR OWN Solve, write as an interval and show it on the line.

$3 - 2x \geq x - 6$



☐

3 ON YOUR OWN Solve.

$|2x - 3| < 5 \rightarrow$ ☐

$\frac{x-3}{x+2} \geq 0 \rightarrow$ ☐

4 ON YOUR OWN Solve the system.

$3x + y = 11,\ x - y = 1 \rightarrow (x, y) =$ ☐

5 ON YOUR OWN CHALLENGE For which a does $(a - 3)x = a$ have no solution?

$a =$ ☐

How am I doing?

- ☐ I can confidently solve equations, inequalities and systems and write solutions as intervals.
- ☐ I can, but sometimes I need the number line, a sign table or a graph.
- ☐ I need more practice.