NAME: Period:

Notes 4-5
Solving Inequalities:
Addition and Subtraction

Int 1 **Unit 4**

Inequalities

$<$ less than

$>$ Greater than

$\leq$ less than or equal to

$\geq$ Greater than or $=$

OPEN DOT $<$ $>$

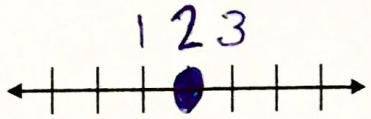
NOT Equal

CLOSED DOT $\leq$ $\geq$

Could be equal to

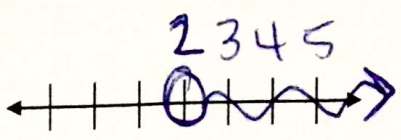
Graph the following on the number lines provided.

Ex. 1: $g = 2$

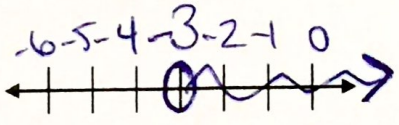


Ex. 2: $g < 2$

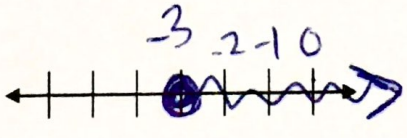
Ex. 3: $g > 2$



Ex. 4: $t > -3$

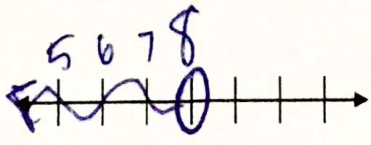


Ex. 5: $t \geq -3$



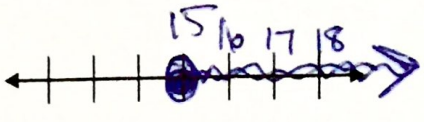
Ex. 6: $8 > r$

$r < 8$

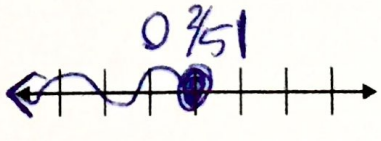


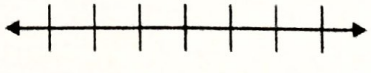
Ex. 7: $15 \leq r$

$r \geq 15$



Ex. 8: $k \leq \frac{2}{5}$





Solve using inverse operations.

Ex. 9: $x + 3 > -10$

$-3 \quad -3$

$x \quad -13$

$\boxed{x > -13}$

Ex. 10: $-6 \geq n + (-5)$

$+5 \quad +5$

$-1 \quad n$

$-1 \geq n$

$\boxed{n \leq -1}$

Ex. 11: $a - 3 < 8$

$+3 \quad +3$

$\boxed{a < 11}$

Solve using inverse operations and then graph on the number line provided.

Ex. 12: $-5.4 + y \geq 7$

$+5.4 \quad +5.4$

$\boxed{y \geq 12.4}$

Ex. 13: $a + \frac{1}{2} > 2$

Ex. 14: $h - (-4) < 20$

$y \geq 12.4$