

## HW 4-6

Solving Inequalities:  
Multiplication & Division

## Unit 4

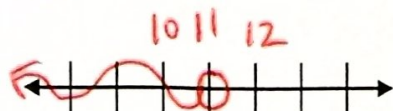
Int 1

Graph the following on a number line.

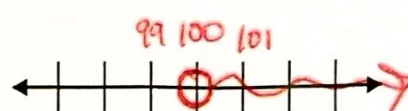
1)  $x = 8$



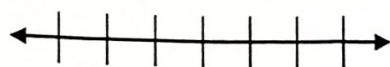
⑤  $w < 11$



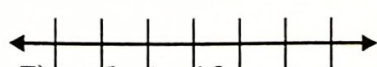
⑨  $100 < c$



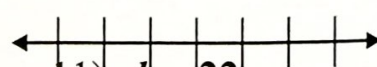
2)  $y \geq -3$



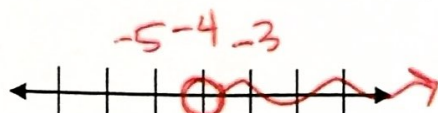
6)  $-3 \leq g$



10)  $a < 22$



3)  $z > -4$



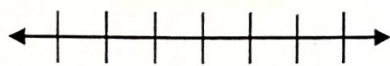
7)  $b \leq -10$



11)  $b = 22$



4)  $5 < h$



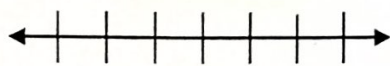
8)  $-1 \leq n$



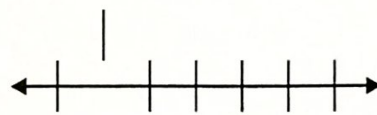
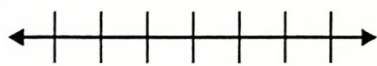
12)  $22 < d$



~~5)  $w < 11$~~



~~9)  $100 < c$~~



Solve each inequality using INVERSE OPERATIONS. Show your work.

13)  $8x > -16$

$$x > -2$$

16)  $12a \geq -24$

$$a \geq -2$$

14)  $-8x > 16$

17)  $-12 \leq 4a$

15)  $7y < -35$

$$y < -5$$

18)  $5 > \frac{x}{-2}$

Solve each inequality using INVERSE OPERATIONS. Show your work.

$$19) \quad \frac{r}{-3} \leq -4$$

$$r \geq 12$$

$$23) \quad 26 > -\frac{2}{5}h$$

$$h > -65$$

$$20) \quad -5x > \frac{3}{10}$$

$$24) \quad -3.9h > -31.2$$

$$21) \quad \frac{r}{-3} \leq 6$$

$$r \geq -18$$

$$25) \quad \frac{r}{7} \leq -7$$

$$r \leq -49$$

$$22) \quad -\frac{7}{8}x \leq \frac{7}{16}$$

$$26) \quad -72 > -9k$$

$$27) \quad -60 < 6k$$

$$k > -10$$

$$28) \quad 27 > -3x$$

$$x > -9$$

$$33) \quad -5 > \frac{x}{7}$$

$$29) \quad -27 > 3x$$

$$34) \quad \frac{p}{-8} \leq 40$$

$$p \geq -320$$

$$30) \quad 26 < 13y$$

$$y > 2$$

$$35) \quad \frac{1}{5}y > \frac{7}{10}$$

$$31) \quad 60a \geq -30$$

$$36) \quad \frac{1}{6}k \leq -8$$

$$k \leq -48$$

$$32) \quad -48 \leq -4a$$

$$a \leq 12$$