

## Warm-Up

Explain what the following sentence really means:

The temperature in Iceland is at least -10 degrees C

I need at least 75 or more

75 or above

$$t \geq 75$$

## 2.1 Writing/Graphing Inequalities

Key Words

 $<$  $\leq$  $>$  $\geq$ 

- less than
- is under
- fewer than
- lower than
- is below
- Smaller than

- less than or equal
- maximum
- is no more than
- at most

- more than
- greater than
- above
- bigger than

- greater than or equal
- minimum
- is no less than
- at least<sup>th</sup>

Ex 1: Write the Inequalities

a) a number  $w$  minus 3.5 is less than or equal to -2

$$w - 3.5 \leq -2$$

b) three is less than a number  $n$  plus 5

$$3 < n + 5$$

c) zero is greater than or equal to twice a number  $x$  plus 1

$$0 \geq 2x + 1$$

Try!

1) a number  $b$  is fewer than 30.4

$$b < 30.4$$

2)  $-\frac{7}{10}$  is at least twice a number  $k$  minus 4

$$-\frac{7}{10} \geq 2k - 4$$

## Ex 2: Checking for Solutions

Is -4 a solution to the following inequalities:

a)  $x+8 < -3$

b)  $-4.5x > -21$

Try! Is -6 a solution to...

3)  $c+4 < -1$

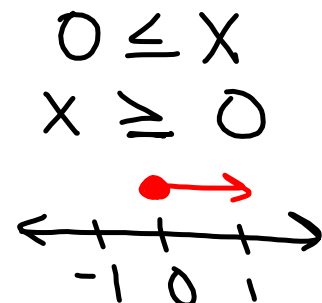
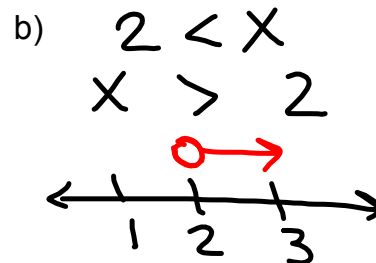
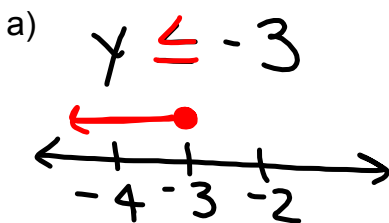
4)  $10 \leq 3-m$

5)  $21 \div x \geq -3.5$

6)  $4x-25 > -2$

Ex 3: Graphing Inequalities

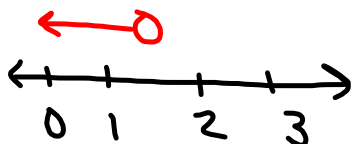
Variable symbol number



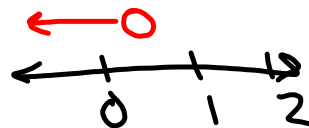
Try!

7)  $1.5 > g$

$g < 1.5$



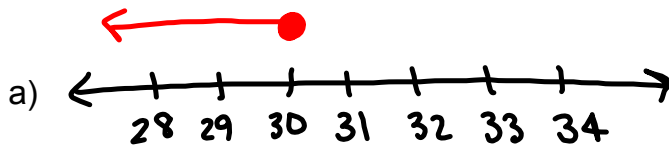
8)  $r < 0.5$



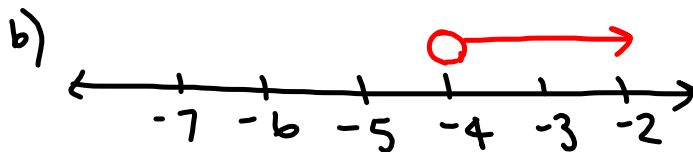
Ex 4 Given the Graph, Write the Inequality

Remember:

$$x \leq 30$$



$$x > -4$$



WS p58 2.1

# 1, 3, 5-8, 10,  
29, 30, 32, 35,  
41-44