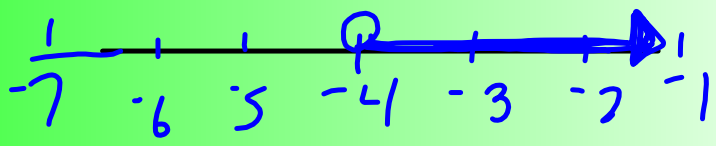
Warm-Up

A. Draw a number line

B. Give 4 possible solutions

0, $-3\frac{1}{2}$, 42, 386

$r > -4$



$r \geq -4\frac{1}{4}$

-4.25

$-3.2, 0, 58, 364$

Homework questions???

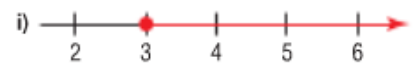
9. Match each equation or inequality with the graph of its solution below. Justify your choice.

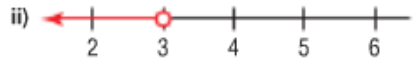
~~a) $m > 3$~~ ~~b) $p = 3$~~

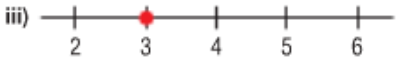
~~c) $k \leq 3$~~ ~~d) $t < 3$~~

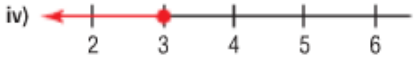
e) $v \geq 3$ ~~f) $3 < u$~~

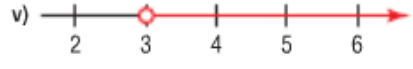
g) $3 \geq h$ h) $3 \leq s$

i) 

ii) 

iii) 

iv) 

v) 

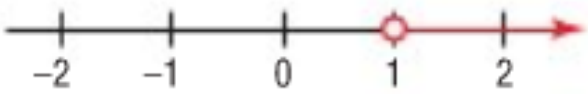
$x \geq 3$ $v \geq 3$ $3 \leq s$

$x = 3$

12. Write an inequality whose solution is graphed on the number line. In each case, are 1 and −3 solutions of the inequality? Explain.

Page 293

sketch graph -3 and 1

a) 

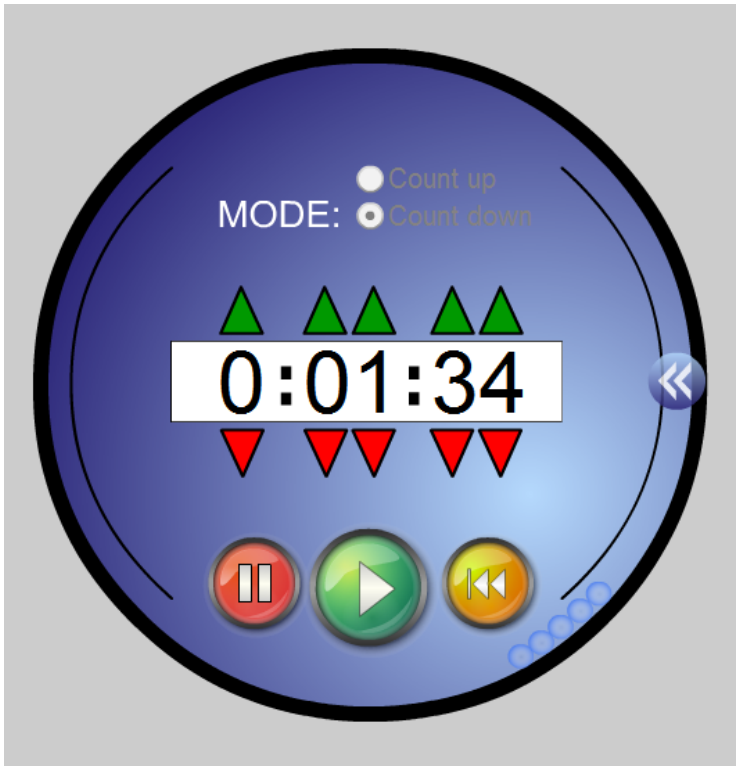
$x > 1$ No No

b)

$x \leq 2$ yes yes

c)

$x < -10$ no no


Count up
MODE:
Count down
0:01:34

Section 6.4 Solving Inequalities using addition and subtraction...

What you already know

x - 4.5 = 6.2

$x - 4.5 + 4.5 = 6.2 + 4.5$

$x = 10.7$

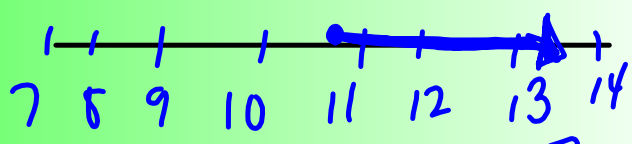
$x - 4.5 \geq 6.2$

$x - 4.5 + 4.5 \geq 6.2 + 4.5$

$x \geq 10.7$

Left	Right
$x - 4.5$	≥ 6.2
$10.7 - 4.5$	
6.2	≥ 6.2

A. Graph



B. Verify [Check]

$90 + 5d < 100 + 4d$

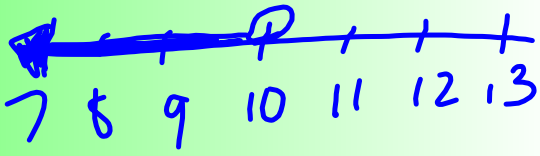
A. Solve
B. Graph
C. Verify

$90 + 5d - 4d < 100 + 4d - 4d$

$90 + d < 100$

$90 - 90 + d < 100 - 90$

$d < 10$



L	R
$90 + 5d$	$< 100 + 4d$
$90 + 5(0)$	$< 100 + 4(0)$
90	< 100

Rewrite with variable on left side

$13 \leq 4 + x$

$4 + x \geq 13$

$x + 4 \geq 13$

$13 < x - 4$

$x - 4 > 13$

$-4 + x > 13$

$$7t - 4 > 3t + 12$$

$7t - 3t - 4 > 3t - 3t + 12$

$4t - 4 > 12$

$4t + 4 > 12 + 4$

$\frac{4t}{4} > \frac{16}{4}$

$t > 4$

- Solve
- Graph
- Is -4 a possible solution?

No

Page 293 #13 a, c, e

Page 298

#7 all solve then match

#8 solve and graph All!