Algebra 1 Week 6 Friday Warm Up

Skill 1: Solve, showing all steps.

1. $14-(5c-3)=4c-2(6c+2)+5c$

Skill 2: Write and solve a proportion to find the answer.

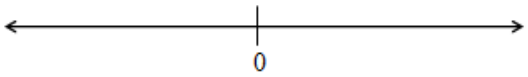
2. Cinderella sneezed 14 times in 3 days. If she sneezes at a regular rate, about how many times will she sneeze in a year? There are 365 days in 1 year.

Solve:

3. $\frac{2x+3}{x+1}=\frac{7}{3}$

Solve and graph

4. $7x-3x+5-12x<-19$

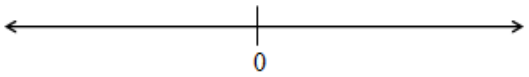


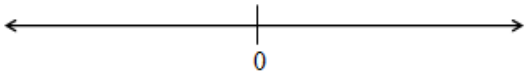
5. $A: x>3$ $B: x\geq 4$ $C: x\leq -6$

graph:

a) A *and* B

b) A *or* C





remember:

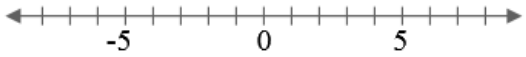
And: overlap

Or: take both graphs

3-6.E Compounding Inequities

Solve each compound inequality. Graph the solutions on the number line AND state 3 numbers in the solution set. Show all your work!

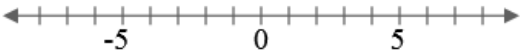
1. $4m-5>7$ or $4m-5<-9$



Solution:

3 numbers in the solution set:

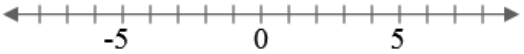
2. $-1\le x+2\le 4$



Solution:

3 numbers in the solution set:

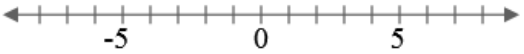
3. $y+6>-1$ or $y-2\le 4$



Solution:

3 numbers in the solution set:

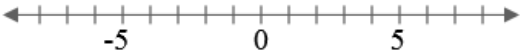
4. $2(5-x)>12$ and $7x>4x+9$



Solution:

3 numbers in the solution set:

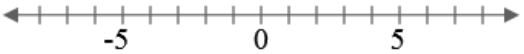
5. $-6\le 2x-2\le 0$



Solution:

3 numbers in the solution set:

6. $3y+11\ge 14$ or $2y\le 5y-12$

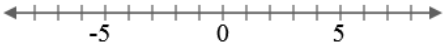


Solution:

3 numbers in the solution set:

HW

7. $3(c+4)<12$ and $c+2>5$



Solution:

3 numbers in the solution set:

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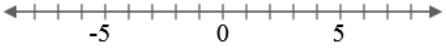
8. $3-2k\le 7$ or $2k+13<1$



Solution:

3 numbers in the solution set:

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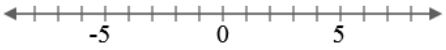
9. $2(3w+5)<7$ or $2w+8<5w-1$



Solution:

3 numbers in the solution set:

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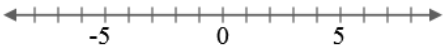
10. $8<2(x+3)-4\le 14$



Solution:

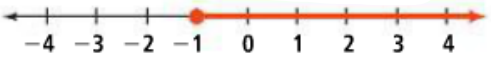
3 numbers in the solution set:

HW: 3-6.F + p 193: 1, 3, 7, 8, 12, 14, 17, 19, 22
(notice that some say solve AND graph!)

Do you know HOW?

Write an inequality that represents each verbal expression or graph.

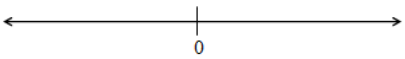
1. all real numbers y greater than or equal to 12

3. 

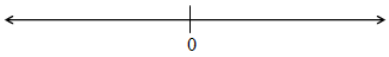
7. A cat weighs no more than 8 lb.

Solve each inequality. Graph the solutions.

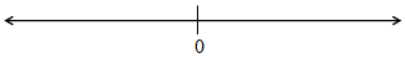
8. $8d + 2 < 5d - 7$



12. $5(3p - 2) > 50$



14. $6 \geq -\frac{4}{5}n$



17. Suppose you earn \$7.25 per hour working part-time for a florist. Write and solve an inequality to find how many *full* hours you must work to earn at least \$125.

Solve each inequality, if possible. If the inequality has no solution, write *no solution*. If the solutions are all real numbers, write *all real numbers*.

19. $15f + 9 > 3(5f + 3)$

22. $8z + 5 - 2z \leq 3(2z + 1) + 2$