

NAME \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

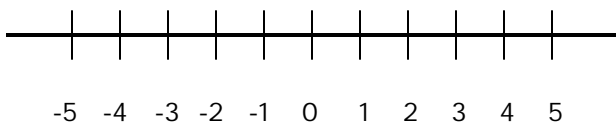
# Sections 2.1-2.2

## ALGEBRA

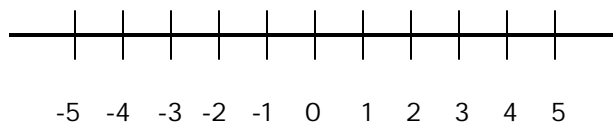
### Inequalities Mixed Review: Practice C

Directions: Graph Each Compound inequality on the Number Line

1.  $x < 3$  and  $x = -1$



2.  $x = 5$  and  $x > 1$



How many integer solutions are there?

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- Coach Rigg's scores in three trips to the golf course were 75, 80, and 65. After golfing for a fourth time, his average was 70. What score did he have to shoot in his fourth round to get that average?
- Homer has \$50 to spend at the book store, but he wants to have \$10 left over for dinner. Each book he wants to buy costs \$4.50. What is the maximum number of books that he can buy?
- Jenny wants to buy 6 cookies. She also is going to buy a candy bar for \$1.50. The total amount of money that she spent was \$25.50. How much was each cookie?

6. Jose bought 8 identical CD's and a DVD for \$15. The total cost of the items was less than \$39. Write an inequality and solve it for the cost  $c$  of the CD's.

7. Which equation below represents all points that are 1 unit from 5?

A)  $|x+1|=5$

B)  $|x+1|=-5$

C)  $|x-1|=5$

D)  $|x-5|=1$

8. The school is holding a carwash fundraiser.

The school spends \$50 for all the equipment for the carwash.

They will pay \$2 for water/supplies for each car that they wash.

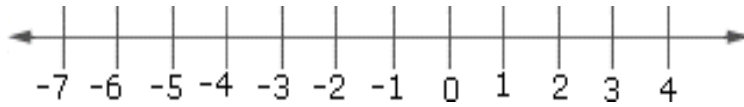
They will earn \$5 for each car that they wash

a) Write an expression for the total cost to wash  $x$  cars.

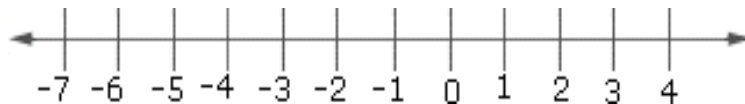
b) Write an expression for the total earnings they will receive for washing  $x$  cars

c) How many cars do they need to wash in order to make at least \$100?

9. Graph the compound inequality  $x > 3$  AND  $x < 6$ . How many integer solutions are there?



10. On the graph below, graph the solution to  $|x-1| < 5$



11. Kate has \$60 to buy presents. The wrapping supplies she needs cost \$12. Each gift she wants to buy cost \$8. Write an inequality that describes the maximum number of gifts that Kate can buy.

12. Solve:  $5 < 3x - 13 < 20$

13. Solve:  $4x < -16$  OR  $2x + 4 > 10$

14. Jim is rolling his change to take to the bank. He needs 40 quarters to make a \$10 roll. He has already rolled 80 of his 225 quarters. How many more complete \$10 rolls can he make?

