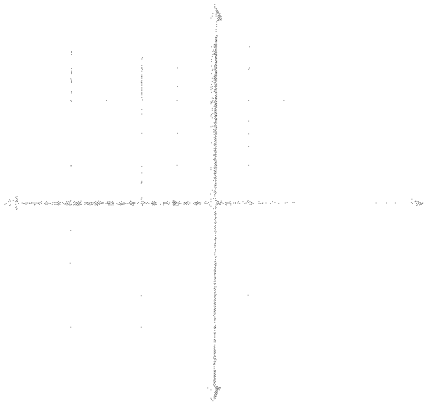
Functions and Graphing

Chapter 7 Review (Day One) Name _____

Graph the following equations.

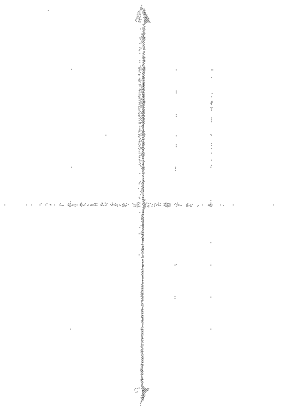
1) $y = 5 + x$

x	y



2) $y = 2x + 1$

x	y



3) Of the equations you've graphed above, which have linear relationships? How do you know?

Simplify the following expressions.

4) $6x + 2 - 3x + 4$

5) $6(y - 1) + 5$

Solve the equation.

6) $8 + w = 13$

7) $15 = -2.5h$

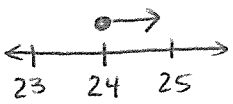
8) $\frac{x}{6} = -11$

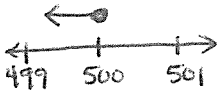
9) $2s + 6 = 64$

Answers for the back side:

10) $8 + \frac{t}{20} = -2, \quad t = -200$

11) $6 + 2x = 40$, $x = 17$

12) $t \geq 24$, 

13) $f \leq 500$, 

14) $y = x + 4$

15) $y = x - 5$

Write an equation and solve.

10) 8 more than the quotient of t and 20 is -2.

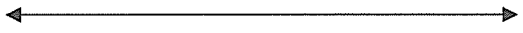
11) Serena owns 6 more than twice as many CDs as Sam. Serena owns 40 CDs.
Write an equation to model this situation. Then solve the equation to find how many CDs Sam owns.

Write an inequality for the situation written below. Then graph it.

12) Tony earned $24 or more.

Inequality: _____
(letter – symbol – number)

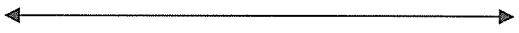
Graph:



13) The food drive collected at most 500 items.

Inequality: _____
(letter – symbol – number)

Graph:



Write a function rule for the input-output table.

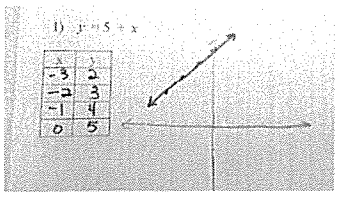
14) y = _____

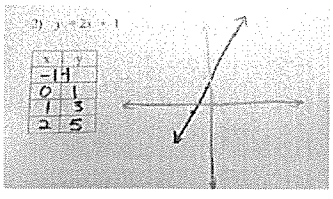
Input x	Output y
0	4
1	5
2	6
3	7

15) y = _____

Input x	Output y
-2	-7
-1	-6
0	-5
1	-4

Answers for the front side:





3) Both graphs have linear relationships because they are straight lines.

4) $3x + 6$

5) $6y - 1$

6) $w = 5$

7) $h = -6$

8) $x = -66$

9) $s = 29$