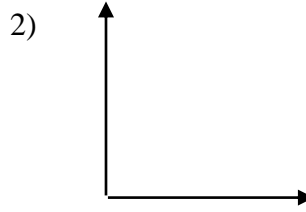
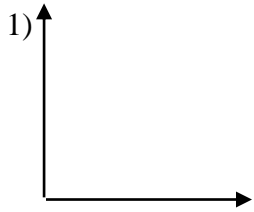


Only use a calculator if the problem states that you can.

## DAY 1

Draw a function that represents each situation. Be sure to label the axis.

1. Kai turns on the oven and sets it to  $300^\circ$ . He bakes some cookies and then turns the oven off.
2. Nick has the flu and his temperature rises slowly until it reaches  $110^\circ$ .



Solve each equation. Leave all answers in reduced fractions.

3.  $\frac{5}{6}x - \frac{1}{2} = \frac{5}{3}$

4.  $\frac{1}{2}(x-6) = 2$

5.  $5(x-2) + 8x - 14 = 9x - 2$

6.  $5x - (3-x) = 2x + 6$

Solve and graph each inequality.

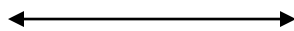
7.  $-6x < -12$

8.  $\frac{n}{5} > 20$

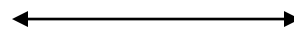
9.  $-\frac{x}{5} + 4 \geq -1$



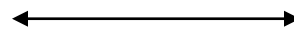
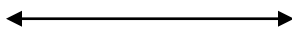
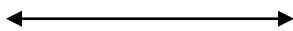
10.  $-5 - x < -10$



11.  $\frac{3}{4}x < -6$

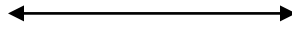
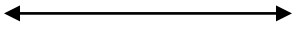


12.  $7 - 5w > 22$



13.  $4x+7 < 3x+18$

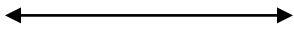
14.  $8y-3 \leq 5(2y+1)$



Solve and graph each compound inequality.

15.  $1 < -4 + p < 5$

16.  $\frac{x}{2} + 1 \leq 7$  or  $x - 11 > 7$



17.  $2 \leq 2x + 4 \leq 16$

18.  $8 \leq 2x - 1 \leq 12$



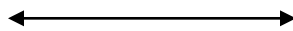
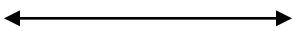
Solve each absolute value problem. Graph #21&amp;22 on a number line.

19.  $|7+x| - 2 = 5$

20.  $-2|-5-2x| = -26$

21.  $\left| \frac{1}{2}x - 3 \right| \leq 2$

22.  $|5-3x| - 2 \geq 6$



23. Write an example of an absolute value equality that has no solution.

24. One of these inequalities has no solution and the other has all real numbers as the solution. Explain which one has each solution and why.

$|x-4| > -5$

$|x-4| < -5$

Use the charts below to find the slope.

25.

year	# of students in the freshman class
2008	245
2010	295
2012	345
2014	395

26.

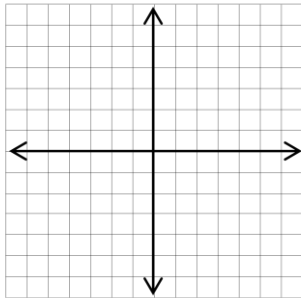
x	y
6	20
3	22
0	24
-3	26

27.

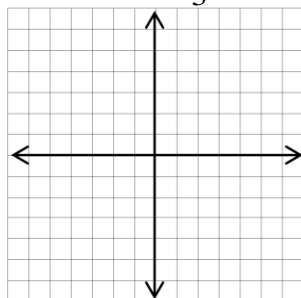
x	y
2	40
4	50
6	60
8	70

Graph each line.

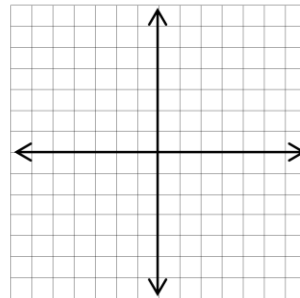
28.  $y = 3x + 1$



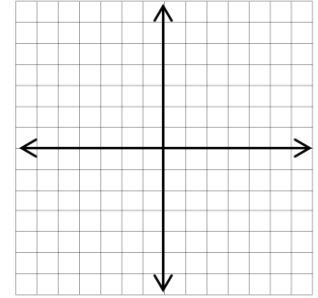
29.  $y = 5 - \frac{2}{3}x$



30.  $y = -x$

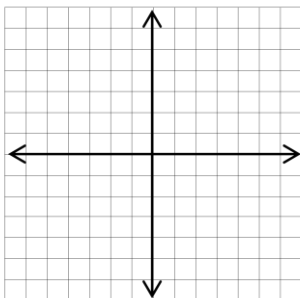


31.  $y = 5$

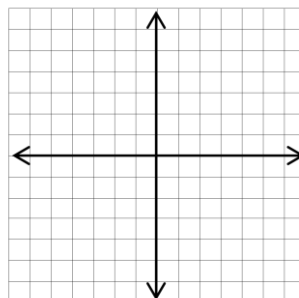


Find the slope and y-intercept of each line, then graph.

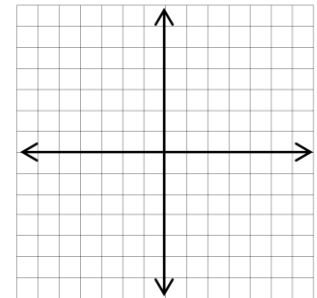
32.  $x + 2y = 8$



33.  $3y - 2x = 9$



34.  $-3y + 6 = -x$



35. A leaf falls from a tree. In five seconds, it's floated down to a height of 16 feet. In seven seconds, it's down at 8 feet.

a. Find the equation of the line describing the height of the leaf.

b. Use your equation to find the height of the leaf in 8 seconds.

c. Write a sentence explaining what the slope means for the leaf in this problem (you must have the slope in your sentence).

d. Write a sentence explaining what the y-intercept means for the leaf in this problem (you must have the y-intercept in your sentence).

e. Find the x-intercept. Then write a sentence explaining what the x-intercept means for the leaf in this problem (you must have the x-intercept in your sentence).