Friday
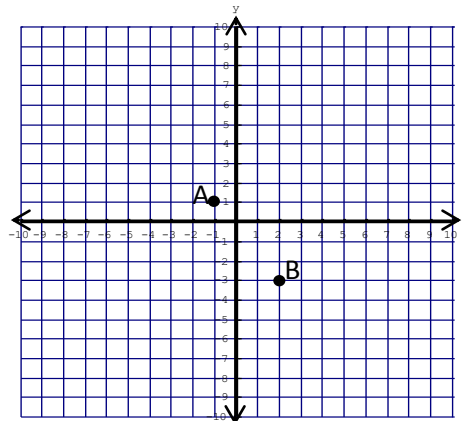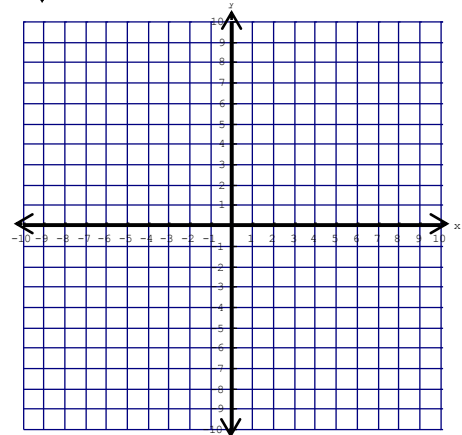
1. What is the distance from A to B?

2. Graph a system of two equations that has a single solution of (−2, −4) and give the equation for each of your lines.

3. When Kyle solved this linear system, he ended up with the equation 0=0. What is the solution to the system? Explain your answer.

   2x + 3y = 6
   4x = 12 − 6y

4. Create an equation that has no solution. *Verify your answer with support work and/or a written explanation.*

5. Line segment AB begins at point A (−3,2) and ends at point B (1,−2). The segment is translated by < x − 2, y + 1 > and then reflected across the y-axis to form segment A'B'. Draw your translations and find the length of segment A'B'.
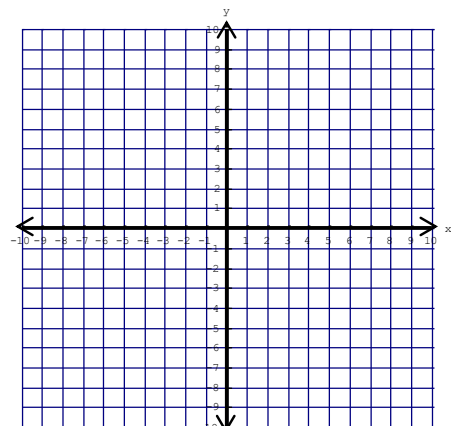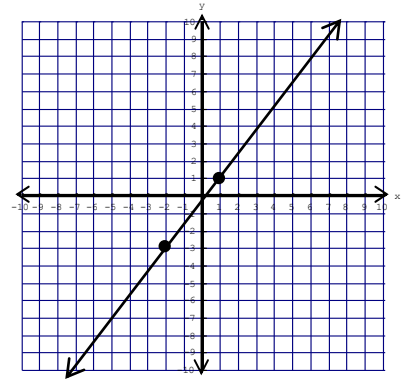
1. Which transformation is not an isometry?

    a) rotation   b) reflection   c) translation   d) dilation

2. What is the rate of change for the given line?
    Write an equation that has a greater rate of change and graph it.

3. Alice thinks that there is one solution for c = ax – bx if a, b, and c are non-negative integers.
   What values of a, b, and c would result in no solution? All real numbers? *(These are counter
    examples to the original conjecture.)*

4. What is the rate of change for the function represented by the table?
   Write an equation for a different function with the same rate of change.

x	y
–2	–4
0	–6
2	–8

5. The bases of both triangles lie on a line. The measure of angle 4 is less than the measure of
    angle 8 (*(m = measure)* $m\angle 4 < m\angle 8$). Write a comparison for the $m\angle 3$ and $m\angle 7$, and for
    $(m\angle 1 + m\angle 2)$ and $(m\angle 5 + m\angle 6)$.
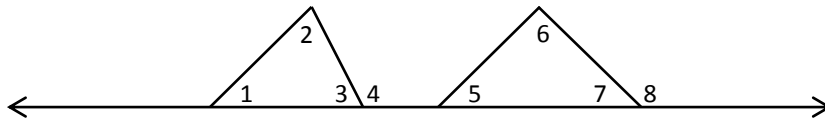
6. The table shows the relationship between the hours of practice and the percentage of free
    throws made. Draw a graph of the data. Describe the function that models this data (in words,
    paragraph form).

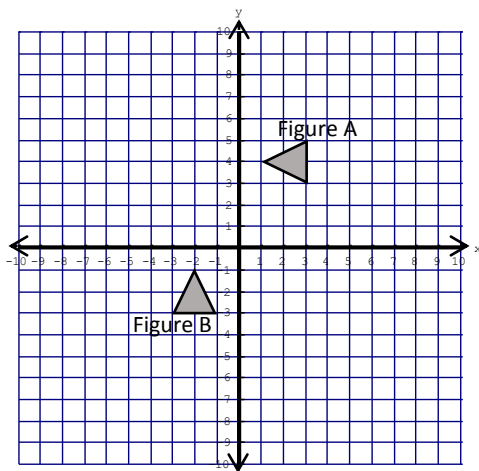| hours	%
0	50
1	62
2	71
3	76
4	68
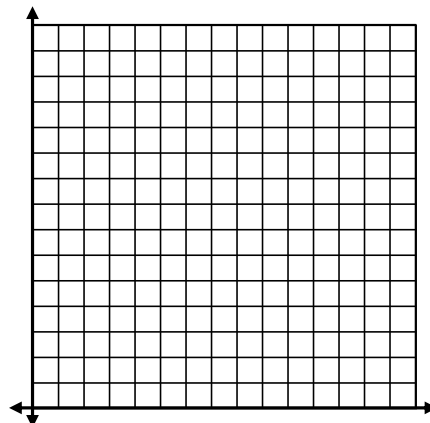
Wednesday

1. Draw a line "b" such that lines "a" and "b" have a solution of (3,–1) and the y-intercept of line "b" is positive and the slope of line "b" is less that 0 but greater than –1.
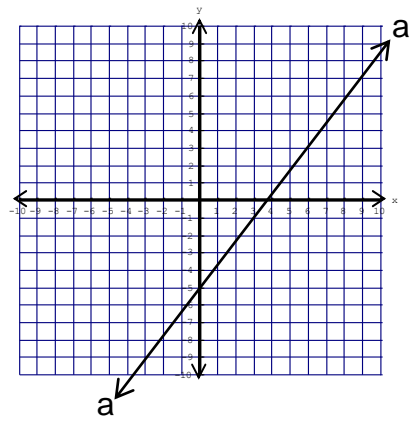
2. Describe a set of transformations that includes a rotation around the origin that moves figure A onto figure B.

3. What is the rate of change in the number of people in the theater per hour?

| Time	# People
6:00	350
7:00	300
9:00	200
10:00	150

4. The local batting cage gives batting lessons for $50 and pitching lessons for $60. This week, they offered pitching lessons for $52 and 10% off batting lessons. They did 16 pitching lessons and 21 batting lessons. They need $1900 per week to pay their bills. Did they make enough?
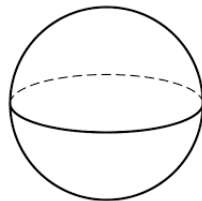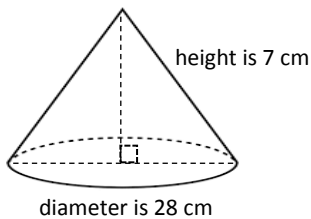
1. Brandon's car can travel $85\frac{1}{2}$ miles on $4\frac{1}{10}$ gallons of gas. How far can he travel on one gallon?

2. The eighth grade students were asked about their ownership of a computer and television. Fill in the empty boxes representing the totals and answer the following questions.

	television	no television	total
computer	127	138	
no computer	89	78	
total			

   a. How many students own a computer but do not own a television? _____

   b. How many students do not own a computer? _____

   c. What percentage of students interviewed own a television and a computer? _____

3. Write an interpretation (which includes the rate) of the given graph showing a plant's growth.
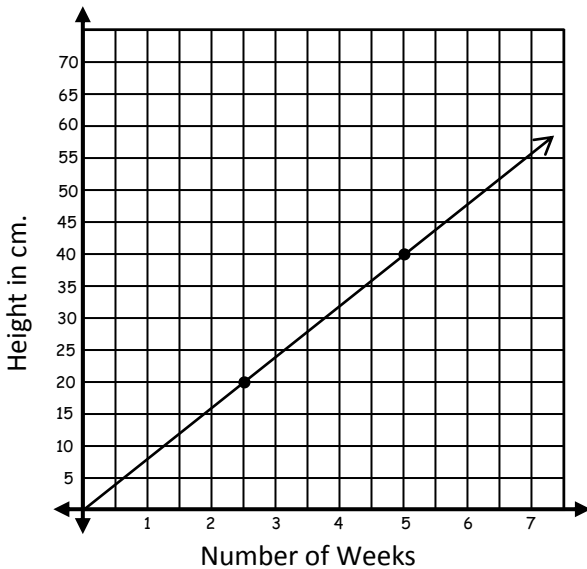
4. The cone and the sphere have equal volumes. *(Not drawn to scale.)*

height is 7 cm

diameter is 28 cm

What is the radius of the sphere?