Summer Assignment 2022
Incoming Geometry Honors

Dear Student,

This summer assignment will prepare you for success in Geometry. Please complete the following exercises this summer and be prepared to submit your work by Tuesday September 13 to your Geometry teacher.

This packet will be counted as the first homework assignment of the year. In order to receive full credit, all work must be shown neatly in the space provided or attached to this packet on separate sheets of paper. Answers written with no work shown will receive no credit. You are encouraged to work in groups to help each other, however copying is unacceptable. This packet consists of 7th/8th grade and Algebra 1 concepts, so it is expected that you are coming in to this course knowing this material. If there is anything in this packet that you do not remember, scan the QR code for that section and it will take you to a video lesson on that topic.

You will have a test on the material covered in this packet during the second week of school. This will be your first test grade of marking period 1.

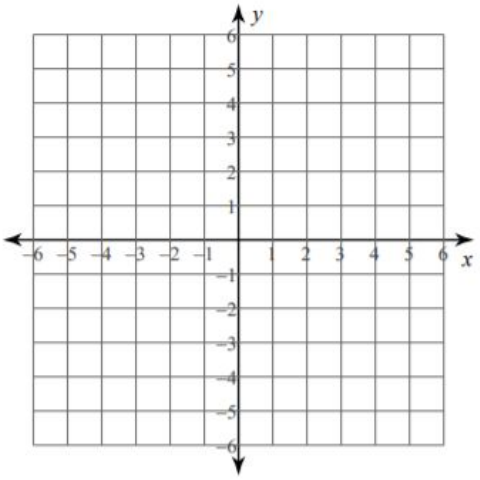
If you have any questions, please reach out to your math teacher or jtalewsky@bbrook.k12.nj.us.

Sincerely,

The BBHS Math Department

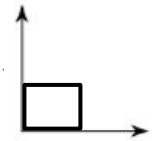
Plot each of the points on the graph below. Label each point with its corresponding letter.

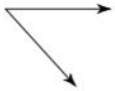
1. A(-1,4) B(5,-1) C(0,-4) D(-6,0) E(-1,-5) F(6,3)



Classify each angle as acute, right, obtuse or straight.

2. 

3. 

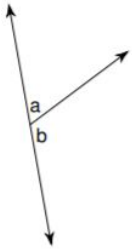
4. 

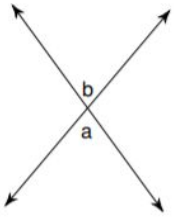
5. 

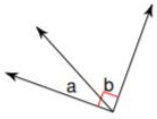
6. 97°

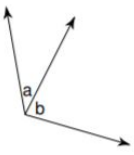
7. 180°

Classify each angle pair as complementary, supplementary, vertical, or adjacent.

8. 

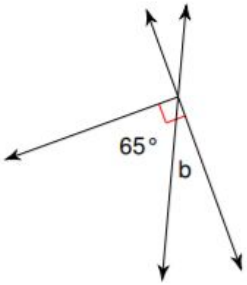
9. 

10. 

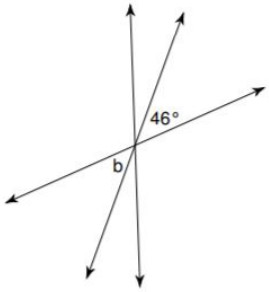
11. 

Find the measure of each indicated angle.

12.



13.



Find the distance between each set of points. Round your answer to the nearest tenth.

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

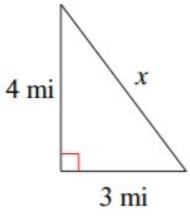
d = distance
(x_1, y_1) = coordinates of the first point
(x_2, y_2) = coordinates of the second point

14. (-3,4) and (5,6)

15. (2,-1) and (-10,5)

Use Pythagorean Theorem to find the missing side length of each right triangle .

16.



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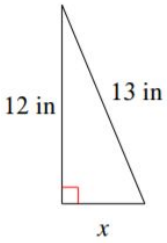

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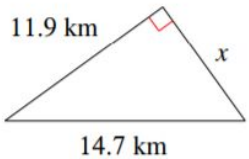

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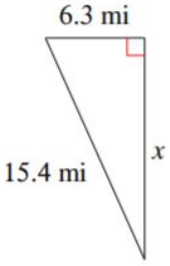
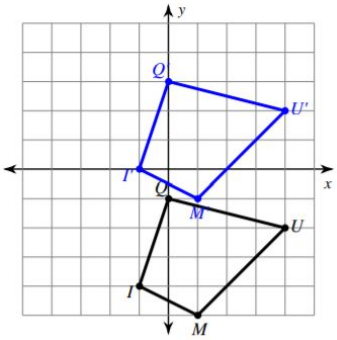


Determine whether each graph represents a translation, reflection, or rotation.

20.



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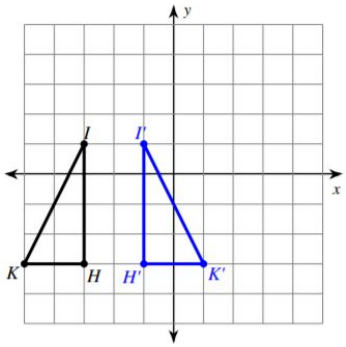
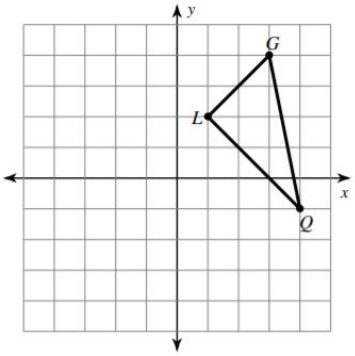
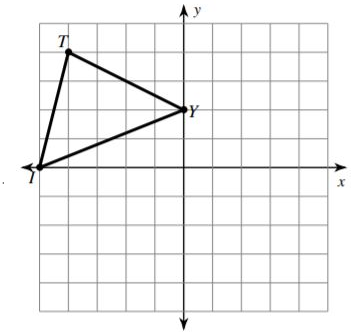


Complete each transformation.

22. Reflection across the y-axis.



23. Translation 3 right and 4 down.



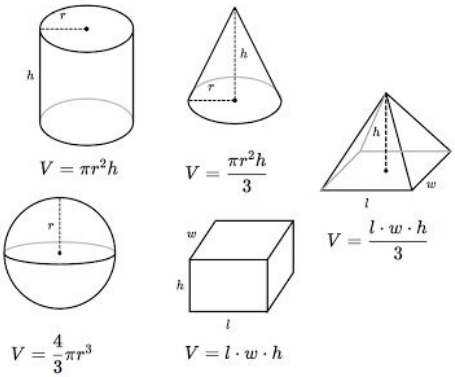
Solve each equation.

24. $2(n+5) = -2$

25. $\frac{v+9}{3} = 8$

26. $-18 - 6k = 6(1+3k)$

Classify each solid. Then find the volume.



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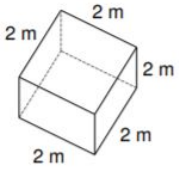

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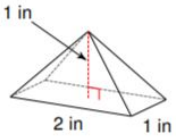

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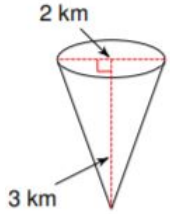
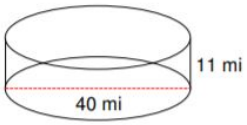


30.



Solve each proportion.

31. $\frac{9}{6} = \frac{x}{10}$

32. $\frac{7}{b+5} = \frac{10}{5}$

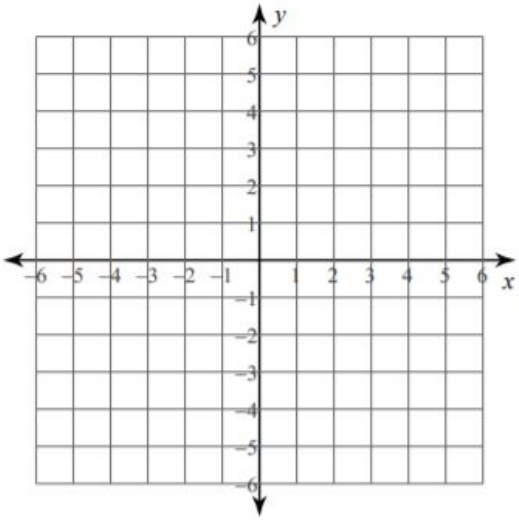
Find the slope using the given points.

33. $(-4, 7), (-6, -4)$

34. $(17, -13), (17, 8)$

Graph the linear equation.

35. $y = \frac{1}{4}x - 1$



Write the equation of each line using the given information.

36. Slope of ⅕ passing through the point (-10,3).

37. Passing through the points (7,2) and (3,-2).

38. What is the difference between finding the perimeter of a shape and finding the area of a shape? Answer in complete sentences.

39. Jamie states that a four sided figure is called a square. Kris states that a four sided figure is called a quadrilateral. Who is correct? Explain your reasoning.

40. Compare and contrast isosceles and equilateral triangles. How are they similar and how are they different?

Math Department Course Requirements

~ Bound Brook High School ~

Course Prerequisites: A combination of 2 or more of the following…

Course Expectations

College Prep	Honors	Dual Enrollment	AP
8th Grade Algebra 1 Readiness Test (Algebra 1 CP)	**Alg. 1 and Geometry** Honors Prerequisite 75%+ CP Prerequisite 90%+ Teacher Recommendation Student Work Ethic LinkIT Form C Meeting/Exceeding ***Appeal Process Available***	**Quant. Reasoning** Honors Prerequisite 70%+ CP Prerequisite 80%+ Teacher Recommendation ***Accuplacer Testing** Student Work Ethic ***Appeal Process Available*** *** Required**	**Statistics** Honors Prerequisite 80%+ CP Prerequisite 90%+ Teacher Recommendation Student Work Ethic ***Appeal Process Available***
	Honors **Algebra 2** Alg. 1 H Prerequisite 75%+ Alg. 1 CP Prerequisite 90%+ Teacher Recommendation Student Work Ethic LinkIT Form C Meeting/Exceeding ***Appeal Process Available***	**Dual Enrollment** **Pre-Calculus Honors** Honors Prerequisite 80%+ CP Prerequisite 90%+ Teacher Recommendation ***Accuplacer Testing** Student Work Ethic ***Appeal Process Available*** *** Required**	**AP/Dual Enrollment** **Calculus** Pre-Calc Honors Prerequisite 70%+ CP Prerequisite 90%+ and ***Accuplacer Testing** Teacher Recommendation Student Work Ethic ***Appeal Process Available*** *** Required**

CP Alg. 1, Geometry, Alg. 2, Pre-Calc

- Summer Assignment Optional
- 8-10 Major Assessments
- 2 Projects Per Year
- Additional Minor Assessments
- Up to 30 minutes of HW each night

Honors Alg. 1, Geometry, Alg. 2

- Required Summer Assignment
- 10-12 Major Assessments Per Year
- 2 Projects Per Year
- Additional Minor Assessments
- Assessments will be timed and must be completed in that time frame.
- Up to 45 minutes of HW each night

Quantitative Reasoning

- Required Summer Assignment
- 4 Labs Per Year
- 4-6 projects Per Year
- Additional Tests/Quizzes
- Final Exam
- Daily Preparation: 1 additional hour for each hour of class time (Studying/Homework)

Pre-Calculus Honors

- Required Summer Assignment
- 6-7 Labs per semester (12-14 year)
- 7 Tests
- 1 Project
- Semester Final Exams (2)
- Daily Preparation: 1 additional hour for each hour of class time (Studying/Homework)

AP Calculus

- Required Summer Assignment
- 8 Labs per year
- Additional Tests/Quizzes
- Final Exam
- Daily Preparation: 1 additional hour for each hour of class time plus weekend assignments

AP Statistics

- Required Summer Assignment
- 2 Major Projects
- 10 Tests
- Additional Quizzes and AP Graded Practice
- Daily Preparation: 1 additional hour for each hour of class time (Studying/Homework)

***Appeal Process*: Students may appeal their placement by scheduling a meeting with the department supervisor. The student should come to this meeting prepared with other evidence to demonstrate they meet the requirements for honors/AP level classes.