Geometry (Level 2 and Level 3)
Summer Assignment

June 2015

Dear Parent(s) or Guardian(s):

Your child is currently scheduled to take Geometry next year. The Geometry curriculum builds on geometry concepts that were introduced in middle school and also uses a number of techniques your child learned in Algebra I. All students entering this course will be expected to complete a math packet this summer. Please be sure that your child brings the completed packet to school on the first day. Teachers will check the packet and each student will receive a grade based on completion.

The purpose of students completing this packet is two-fold. First is to keep mathematical topics fresh in students' minds over the summer. Many of the vocabulary terms included are review of middle school topics, but reviewing and remembering them is imperative to getting a good jump on Geometry at the beginning of the year. Second is to help students and teachers identify the prerequisite concepts that each student has and has not mastered. It is expected that students will define all terms in the packet. In order to assist with definitions, students can access an online textbook with glossary at www.PearsonSuccessNet.com

> Username: GeoSummerPacket
> Password: NHHS2015 (password is case sensitive)

For any student who will not have access to the internet over the summer there are hard copy textbooks that will be made available. Please visit the main office atNorth Haven High School to obtain a copy.

The mathematics department thanks you for your support and wishes you and your family a happy and restful summer!

Sincerely,

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Mathematics Coordinator (Grades 6-12)
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*If you are entering grade 9, you will still have access to IXL throughout the summer. You can use the username and password you used during 8th grade to go online to practice any of the skills in the packet or any skills you feel you need to practice from previous grades.

Basic Ideas of Geometry

Use the glossary to define the following terms:

Three basic **undefined** terms:

Point –

Line –

Plane –

Other **defined** terms:

Segment –

Ray –

Opposite rays –

Angle –

Space –

Other definitions:

Collinear points –

Coplanar figures –

Intersection –

Bisect –

Postulate –

Theorem –

Types of Triangles

Triangle Classifications:

By Angles:

Acute triangle –

Obtuse triangle –

Right triangle –

Equiangular triangle –

By Sides:

Scalene triangle –

Isosceles triangle –

Equilateral triangle –

Types of Quadrilaterals and Polygons

Define and sketch each of the following:

Quadrilateral –

Parallelogram –

Rectangle –

Rhombus –

Square –

Trapezoid –

Kite –

Polygon –

Types of Polygons:

Convex polygon –

Concave polygon –

Regular polygon –

Provide the name of each polygon according to its number of sides: (Online – use page 57, Hard copy – use page 43)

# of sides	Polygon Name	# of sides	Polygon Name
3		8	
4		9	
5		10	
6		11	
7		12	

Angle Pairs

Define and sketch each of the following:

Adjacent angles –

Complementary angles –

Supplementary angles –

Vertical angles –

Linear pairs –

Angle and Segment Bisectors and Postulates

Define the following:
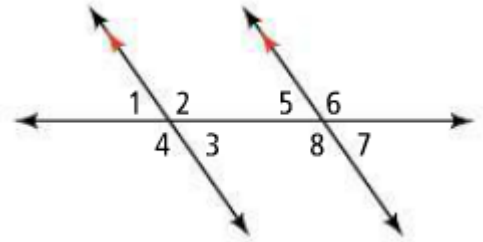
Midpoint –

Segment bisector –

Angle bisector –

Segment Addition Postulate*(Online – use page 21, Hard copy – use page 10)*

Angle Addition Postulate *(Online – use page 30, Hard copy – use page 25)*

Angles Formed by Parallel Lines and Transversals

Define each of the following and use the diagram to identify them:

Transversal –

Alternate interior angles –

Alternate exterior angles –

Corresponding angles –

Consecutive interior angles (same-side interior angles) –