

Name _____ Period _____

Geometry Grade Boost

Part 1: Glossary

Define and illustrate every concept listed below. To illustrate a concept, you must either draw a diagram or give an example. You may use the attached graphic organizer as a sample of how you should lay out your work.

Lesson	Concept
1.4	Polygon, Convex Polygon, Concave Polygon, Equilateral Polygon, Equiangular Polygon, Regular Polygon
1.5	Right Triangle, Acute Triangle, Obtuse Triangle, Scalene Triangle, Equilateral Triangle, Isosceles Triangle
1.6	Consecutive Congruent Sides, Consecutive Congruent Angles, Quadrilateral, Trapezoid, Kite, Parallelogram, Rhombus, Rectangle, Square
1.7	Circle, Concentric Circles, Chord, Diameter, Tangent, Semicircle, Arc, Major Arc, Minor Arc, Central Angle
1.8	Isometric Drawing, Cylinder, Cone, Prism, Pyramid, Sphere, Hemisphere
2.1	Inductive Reasoning, Conjecture, Sequence, Counter Example
2.2	Function Rule
2.4	Deductive Reasoning
13.1	The following Properties of Equalities found on p. 694 of your text: Reflexive Property, Transitive Property, Substitution Property, Addition Property, Subtraction Property, Multiplication Property, Division Property
2.5	Linear Pair Conjecture, Vertical Angles Conjecture

Name _____ Period _____

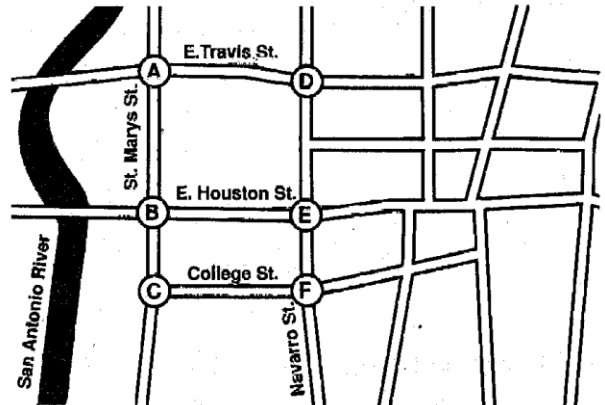
Part 2: Complete the following problems. **SHOW ALL WORK.**

A. Collinear problems

Use the map of part of San Antonio for Exercises 1 and 2.

1. Name a point that appears to be collinear with \overline{EF} . Which streets intersect at this point?

2. Explain why point A is NOT collinear with \overline{BE} .



B. Supplementary/Complementary Problems

Use the drawing of part of the Eiffel Tower for Exercises 1–5.

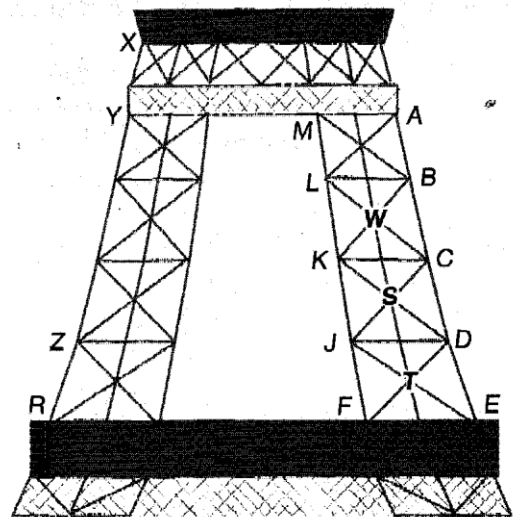
1. Name a pair of angles that appear to be complementary.

2. Name a pair of supplementary angles.

3. If $m\angle CSW = 45^\circ$, what is $m\angle JST$? How do you know?

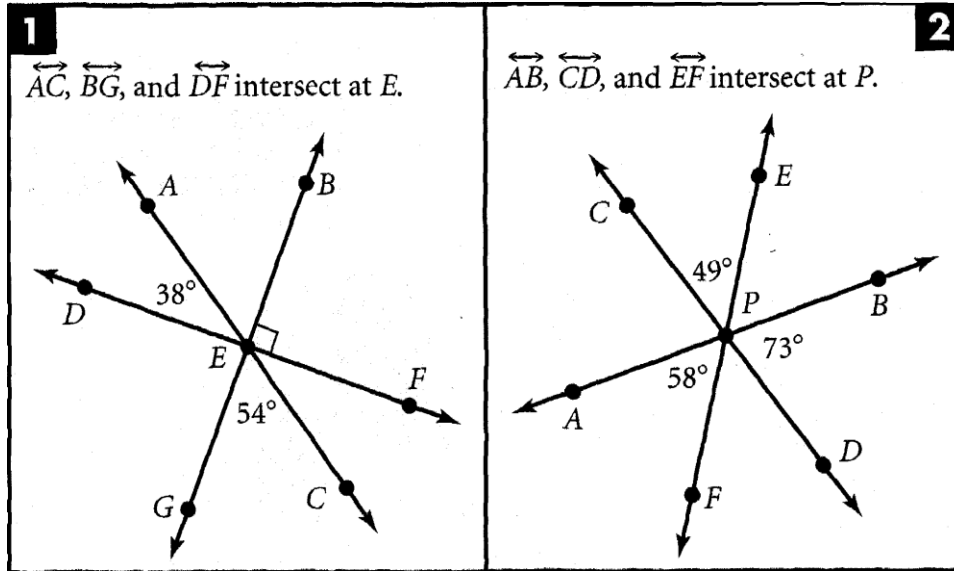
4. If $m\angle FKB = 135^\circ$, what is $m\angle BKL$? How do you know?

5. Name three angles whose measures sum to 180° .



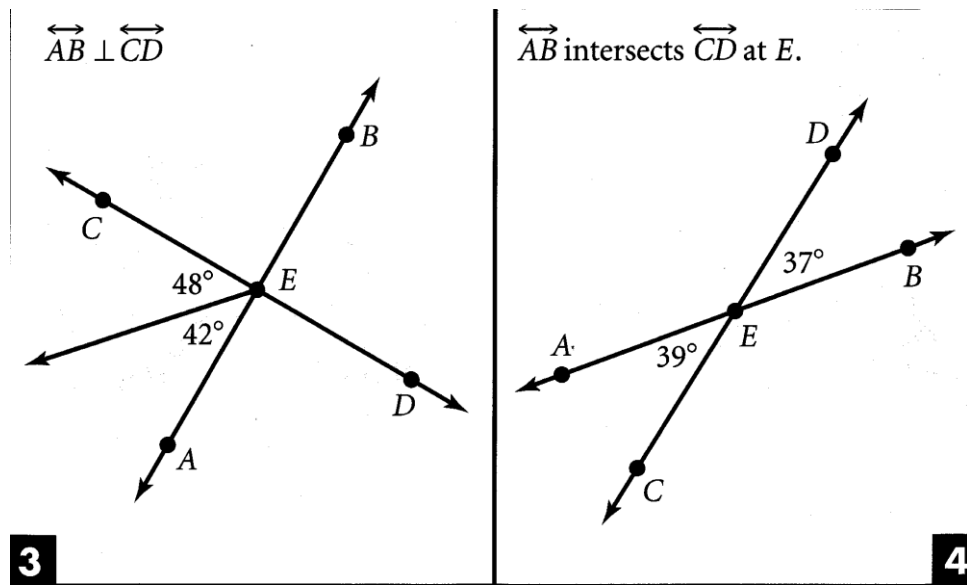
C. Angle Problems

At least one of the boxes below is correct and at least one is incorrect. Below each box explain why it is correct or incorrect.



Correct?
Why?

Correct?
Why?






Correct?
Why?

Correct?
Why?

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D. Inductive Reasoning Problem

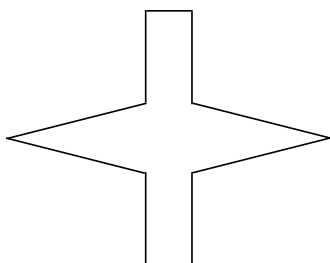
Extend the table. What is the maximum number of squares in a 7×7 figure?

Figure							
Size of Figure	1×1	2×2	3×3				
Maximum Number of Squares	1	5	14				

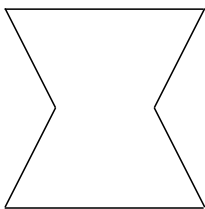
Note: You must count all the squares within the figure. The 2×2 has four 1×1 squares plus 1 2×2 square. So there are 5 squares of different sizes.

E. Polygons

1. Tell whether the figure is a polygon. If it is a polygon, name it by the number of its sides.



2. Tell whether the polygon is regular or irregular. Tell whether it is concave or convex.



F. Nets

Draw a net for this figure.

