SC Honors Geometry - Nappier
Chapter 2 Review

Name: _____

2.1 Conditional Statements

1. Identify the hypothesis and conclusion: If a triangle has two congruent sides, then it is isosceles.

2. Write the converse, inverse, and contrapositive: If it is July, then it is summer.

3. Write the negation: The marker is blue.

2.2 Inductive & Deductive Reasoning

4. Find the next item: 4, 12, 36, 108, …

5. Find a counterexample: the difference of two whole numbers is always positive.

6. Valid or not? Given: If a bird is a penguin, then it cannot fly. Pete is a penguin. Conjecture: Pete cannot fly.

7. Valid or not? Given: If x is a multiple of 8, then x is even. The number 14 is even. Conjecture: 14 is a multiple of 8.

2.3 Postulates & Diagrams

8. Name the postulate: points R and S lie in plane V, so line RS lies in plane V.

9. True or false: two planes can intersect in exactly one point.

2.4 Algebraic Reasoning

10. Name the property: If AB = CD and CD = EF, then AB = EF.

11. Name the property: –7(x – 2) = –7x + 14

2.5 Proving Statements

12. Complete: Reflexive Property of Congruence — segment PQ ≅ _____.

13. M is the midpoint of segment JK. JM = 11x and MK = 7x + 36. Find x and JM.

2.6 Proving Geometric Relationships

14. Two lines intersect so that one angle measures 48°. Find the other three.

15. ∠1 and ∠2 are complementary to the same angle. What can you conclude, and why?

16. Vertical angles measure (10v – 17)° and 73°. Find v.

17. Two angles that form a linear pair measure (7t + 12)° and (3t – 2)°. Find both measures.