Name: _____

Lesson 1.1 ~ The Basics of Geometry

Due Date: _____ Period: _____

Reading Assignment

Access the reading on Ms. Backer's website: www.schultzjen.weebly.com

Under Backer's Schedule, click on Honors Geometry. Scroll down to Chapter 1: Tools of Geometry, Lesson 1.1 ~ The Basics of Geometry. Click on "Read: The Basics of Geometry." Answer the questions that follow.

1. How are points represented and named?

2. What are lines made up of?

3. What do the arrows represent?

4. How are lines named?

5. How are segments like lines?

6. How are segments different from lines?

7. How is a segment named?

8. How are rays like lines and segments?

9. How are rays different from lines and segments?

10. How do we name rays? Why do we name them this way?

11. (Fill in the blank) As long as the _____ is given first, _____ on the ray can be used in its name.

12. Can the ray shown be called $\overrightarrow{XY}$? If not, why?
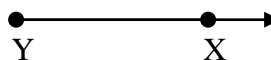
13. What do two rays with a common endpoint form?

14. What is this endpoint called?   What are the two rays called?

15. Where does the number need to be in order to name an angle?

16. When three letters are used to name an angle, what is the letter in the middle?

17. What is the safest way to name an angle?
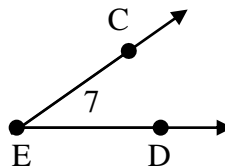
18. What are four possible names for the angle shown?

19. What are the sides of a triangle?

20. What is the vertex of a triangle?

21. A union (∪) and an intersection (∩) is used to describe a triangle and its vertex. Problems 1d, 1e, and 3 refer to unions and intersections. Based on these examples, what is a union and what is an intersection?

22. Points *R, S,* and *T* are collinear. What does collinear mean?

23. In order for us to say that point is between two other points, what must be true?

24. (Fill in the blank) For any three points, there are only two possibilities: they are collinear or they are noncollinear and determine a _____.

25. Given any geometric diagram, what can you assume?

26. What are vertical angles?

27. What is a linear pair of angles?

28. What are complementary angles?

29. What are supplementary angles?

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30. Define coplanar.

31. What is a transversal?

32. What angles are formed by transversals?

33. Describe corresponding angles.

34. What does the geometric symbol ∥ represent?

35. True or False? Two be parallel, lines must be coplanar.
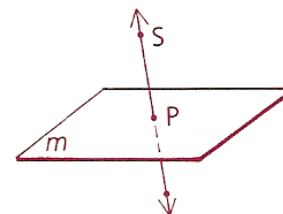
36. What is a plane?
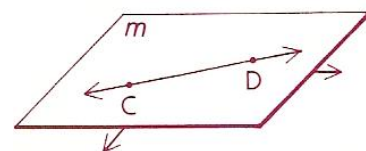
37. How many dimensions does a plane have? What are they?

38. What is the *foot* of a line?

39. There are four ways to determine a plane, what are they?

40. What is the intersection of a plane and a line not contained in the plane? Identify the intersection in the diagram using proper geometric notation.

41. What is the intersection of two planes? Identify the intersection in the diagram using proper geometric notation.

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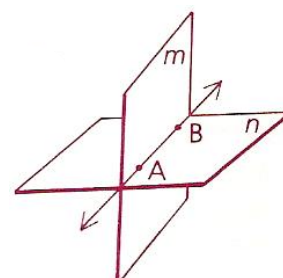
42. When is a line perpendicular to a plane?
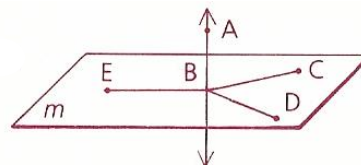
43. What does it mean for two lines, two planes, or a line and a plane to be parallel?

44. Is it possible for two lines to lie in parallel planes but not be parallel? Explain.

45. What is true about the intersection of a plane with two parallel planes?