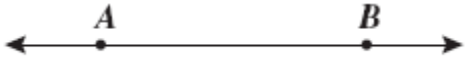
Pre-High School Geometry Chapter 1 **Name:**

1. Which of the following shows only points *AB* ?

a. 

b. 

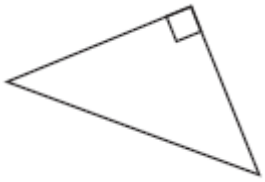
c. 

d. 

2. Which of the following best describes a point?

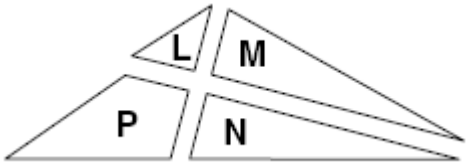
a. All the points between two endpoints
b. A single, exact location in space without length or width
c. All the points extending infinitely in one direction from one endpoint
d. A collection of points that extends infinitely in two opposite directions

3. Which two types of angles are used to form this triangle?



a. Acute, obtuse b. Acute, right c. Obtuse, acute d. Obtuse, right

4. Which 2 shapes below are congruent?



a. M and N b. P and N c. N and L d. L and P

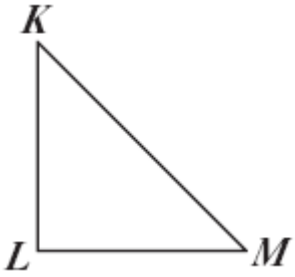
5. Which statement about a ray is true?

a. A ray continues in two directions.
b. A ray has two endpoints.
c. A ray has one endpoint.
d. A ray has no endpoints.

6. The measure of the angle shown is

a. between 0° and 45°
b. greater than 180°
c. between 90° and 180°
d. between 45° and 90°

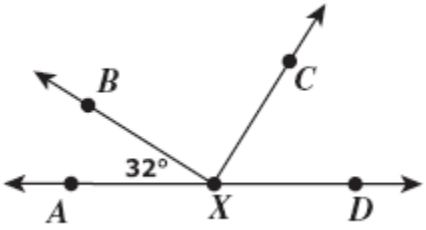
7. Which is closest to the measure of ∠M in the figure shown?



a. 60°
b. 180°
c. 45°
d. 90°

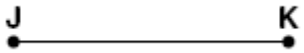
8. In this figure, two rays intersect $\overleftrightarrow{AD}$ at point *X*. The measure ∠*AXB* of is 32º. The figure is not necessarily drawn to scale.

What is the measure of ∠*BXD* ?



a. 148º
b. 122º
c. 58º
d. 90º

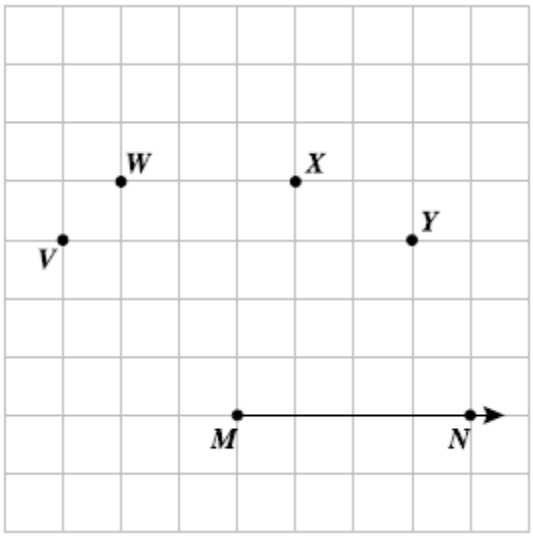
9. Which best describes this figure?



a. Angle JK
b. Line Segment JK
c. Line JK
d. Ray JK

10. Eddie connected points *M* and *N* to make one side of an angle.

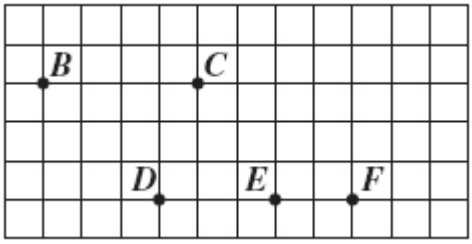
Which other point should he connect to point *M* in order to make a 135 angle?



a. V b. X c. W d. Y

11. Five points are shown on the grid below.

Which points lie on the same line?

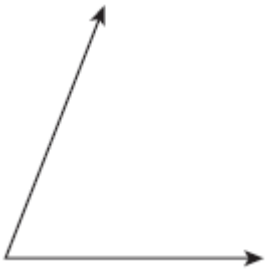


a. Points *B*, *C*, and *D*
b. Points *D*, *E*, and *F*
c. Points *E*, *F*, and *C*
d. Points *C*, *D*, and *E*

12. If ∠QRS and ∠XYZ are complementary, which *must* be true?

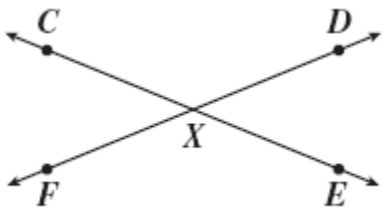
a. The sum of the measures of the angles is 90.
b. The sum of the measures of the angles is 180.
c. One of the angles can measure between 90 and 180.
d. Both angles must measure more than 90.

13. Which is closest to the measure of the angle?



a. 45° b. 90° c. 25° d. 80°

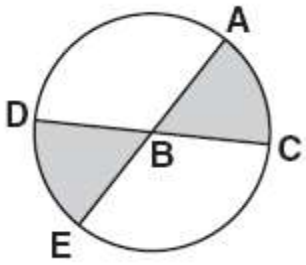
14. If $\overleftrightarrow{CE}$ intersects $\overleftrightarrow{DF}$ at *X*, which angle must be congruent to $\angle CXD$?



a. $\angle FXD$ b. $\angle CXF$ c. $\angle DXE$ d. $\angle FXE$

15. Section *ABC* and section *EBD* of the flower garden contain roses. $\overline{AE}$ and $\overline{CD}$ are straight line segments.

If ∠ABC measures 38º, what is the measure of ∠EBD?

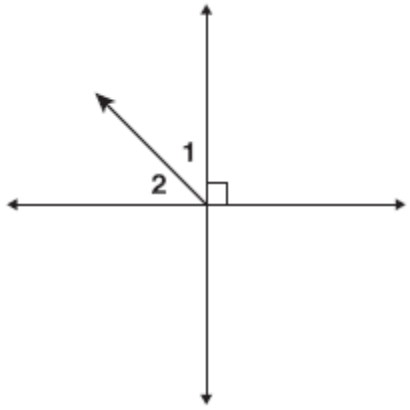


a. 38° b. 142° c. 52° d. 90°

16. The sides of this polygon are best described as --

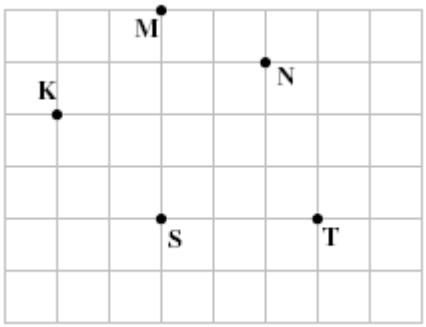
a. lines b. points c. rays d. line segments

17. In the drawing below, what is if m∠1 if m∠2 = 40°?



a. 45° b. 40° c. 50° d. 55°

18. On the grid below, connect point K to point M, then connect point M to point S. What kind of angle has been formed?

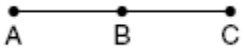


a. Obtuse b. Acute c. Right d. Straight

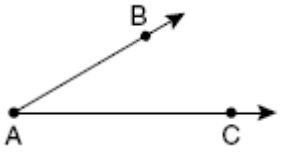
19. Which of the following includes ray AB and ray AC?

a.

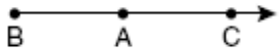
b.



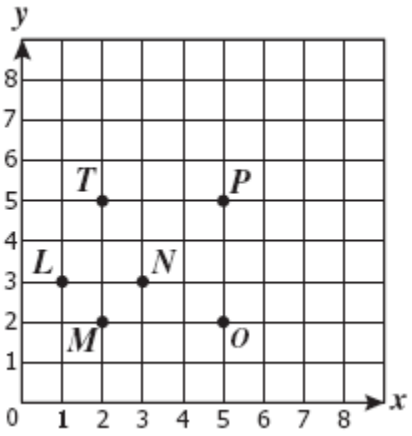
c.



d.



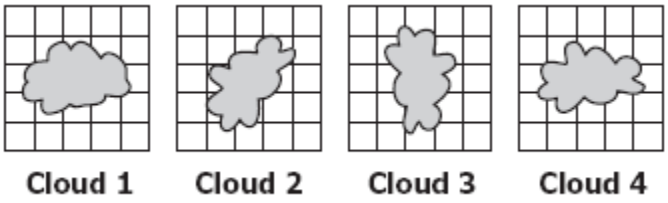
20. The picture shows six points on a grid.



Which three points can be connected to form a right angle?

a. Points *L*, *P*, and *T*
b. Points *N*, *O*, and *P*
c. Points *M*, *O*, and *P*
d. Points *T*, *L*, and *N*

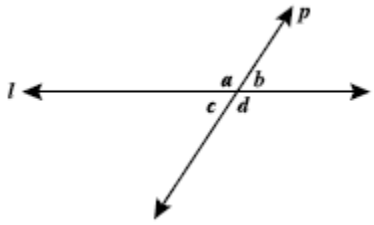
21. Aaron drew these clouds.



Which cloud does not appear to be congruent to the other three?

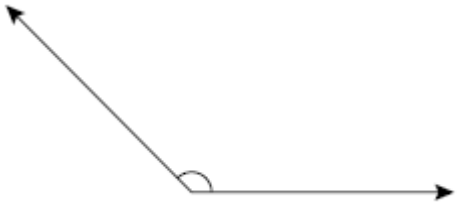
a. Cloud 1
b. Cloud 4
c. Cloud 3
d. Cloud 2

22. In the diagram below, lines *l* and *p* intersect. If the measure of $\angle a$ is 109°, what is the measure of $\angle b$?



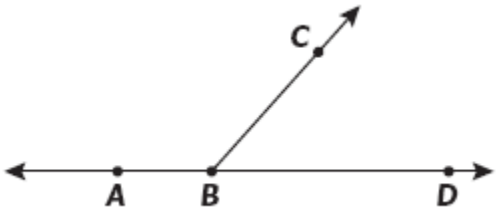
a. 109°
b. 19°
c. 71°
d. 100°

23. Which of the following describes the angle shown to the right?



a. Right b. Straight c. Obtuse d. Acute

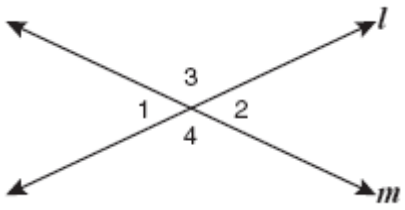
24. Which of the following is not pictured in the diagram?



a. Angle B b. Line segment CD c. Ray BD d. Line AD

25. Lines *l* and *m* intersect so that the measure of $\angle 1$ is 50°.

What is the measure of $\angle 2$?



a. 40° b. 50° c. 100° d. 130°

Student Notes Investigation

1) Name the three undefined geometric terms of section 1:

   _____, _____, _____.
2) The intersection of two lines is which type of these main terms: _____.
3) Points on the same plane are called _____.
4) The measure of a total distance is the _____ of the measure of its parts.
5) Write the midpoint formula (coordinate plane):

6) Write the distance formula (coordinate plane):

7) A nine-sided figure is called a _____.
8) The sum of the lengths of sides of a figure is called its _____
9) Name the three angle classifications:

   _____, _____, _____.
10) The corner point (or common endpoint) of an angle is called its

    _____.
11) How many letters does it take to name an angle? _____.
12) Complementary angles add to _____.
13) Supplementary angles add to _____.
14) Two special "pairs" of angles are _____ pairs and _____ angles.
15) Name the four "constructions" seen in this chapter:
    a. _____
    b. _____
    c. _____
    d. _____