



- \*20 questions
- \*Calculators allowed
- \*Show all work/steps- use separate paper
- \*Recommend time frame 30min -45min

*Provide complete explanations in your responses.*

### Points, Lines and Planes

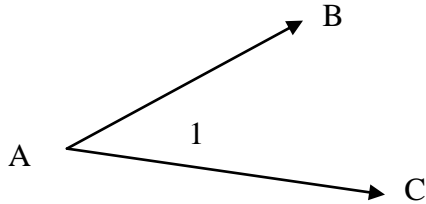
1. Explain the difference between collinear and coplanar.
2. Can the terms points, lines and planes be defined?
3. Write the geometric notation of a line that passes through the points C and D.
4. Point B, F and G are non-collinear, what does this mean?

### Line Segments and Rays

5. Write the geometric notation of a line segment with end points M and N.
6. Does a line have end points? Explain.
7. If two line segments have equal length they are called \_\_\_\_\_.
8. What is the difference between a ray and line segment?
9. The points -8 and 6 are on a number line- what is the distance between the points? (show work)
10. Where is the midpoint of a line segment that is  $\frac{20}{3}$  cm long?
11. (True/False) The bisector of a segment can only be another segment?

Angles

12. Name the angle using two different notation



13. Classify the angles as acute, obtuse, right or straight.

$$\angle ABC = 135^\circ$$

$$\angle EGH = 180^\circ$$

$$\angle XYZ = 90^\circ$$

$$\angle QRS = 27^\circ$$

14. Two angles are adjacent- what does this mean? (Draw a picture to explain).

15.  $\angle XYZ = 85^\circ$ ,  $\angle GHJ = (3x + 10)^\circ$ , given that  $\angle XYZ \cong \angle GHJ$  solve for  $x$ .

16.  $\angle AFG = (10x - 30)^\circ$ ,  $\angle LNP = (2x + 50)^\circ$ ,

$\angle AFG \cong \angle LNP$  find the angle measure of both angles

Theorems and Postulates

17. What is a postulate? How is a postulate different from a theorem?
18. Describe the angle addition postulate.
19. The intersection of two planes forms a \_\_\_\_\_.
20. A line must contain at least \_\_\_\_\_ points.