Answer Key: Pages 3-5

Points, lines and planes

1. Point lines are planes that can best be described as _____ concepts in geometry.

2. Write the notation of a line going through point T to point M.

3. How many points does a line contain?

4. Write the notation of line going through point E to point F.
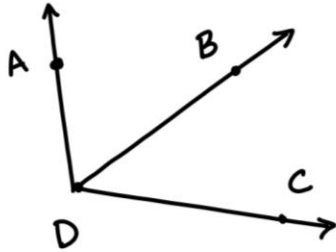
5. A plane contains _____.

Line segments, rays

6. Write the notation of line segment from point E to point F.

7. In your words describe the difference between the symbols of a line and line segment.

8. Write the notation of ray that starts from point X and goes through point Y.

9. The vertex of a ray is _____.

10. We call the location of where two rays intersect a _____.

Angles

11. Define an acute angle.

12. Is a right angle considered an obtuse angle?

13. How many degrees does a straight line contain?

14. An angle that is 90 degrees is called a _____.

15. Name all the angles (using proper notation) of the figure below and classify each as acute or obtuse.

Theorems and postulates

16.   Define a postulate in your words

17.   What is a theorem and how is different than a postulate?

Answer Key

Points, lines and planes

1. Point lines are planes can best be described as ==undefined== concepts in geometry?

2. Write the notation of a line going through point T to point M.

$$\overleftrightarrow{TM}$$

3. How many points does a line contain? *==Infinitely amount==*

4. Write the notation of line going through point E to point F.

$$\overleftrightarrow{EF}$$

5. A plane contains ==points and lines==.

Line segments, rays

6. Write the notation of line segment from point E to point F.

$$\overline{EF}$$

7. In your words describe the difference between the symbols of a line and line segment?
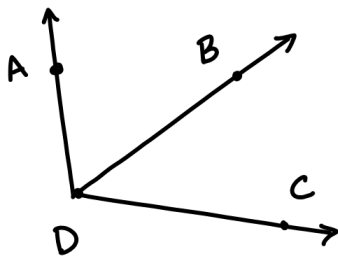
==The notation with a line has two arrows at the end==

8. Write the notation of ray that starts from point X and goes through point Y

$$\overrightarrow{XY}$$

9. The vertex of a ray is <mark>the point where the ray starts</mark>.

10. We call the location of where two rays intersect a <mark>point</mark>.

Angles

11. Define an acute angle. <mark>An angle less than 90 degrees</mark>

12. Is a right angle considered an obtuse angle? <mark>No</mark>

13. How many degrees does a straight line contain? <mark>180 degrees</mark>

14. An angle that is 90 degrees is called a <mark>right angle</mark>.

15. Name all the angles(using proper notation) of the figure below and classify each as acute or obtuse

∠ADB, ∠ADC , ∠BDC   ∠ADB (acute)
∠BDC(acute),   ∠ADC (obtuse)

Theorems and postulates

16. Define a postulate in your words

A postulate is a mathematical law that we cannot prove as true however because it appears to be true we accept as fact

17. What is a theorem and how is different than a postulate?

A theorem is a mathematical law that we can prove using postulates