nes Segments, and Rays
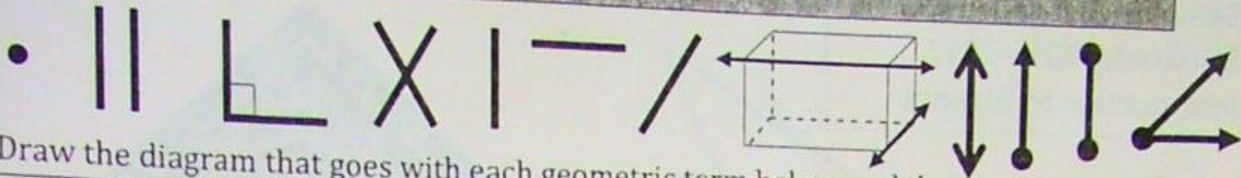
Draw the diagram that goes with each geometric term below, and then write a definition.

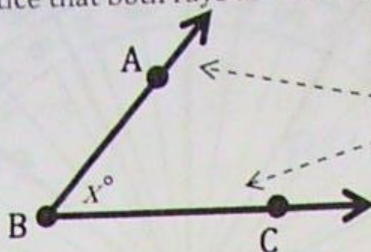| Term	Diagram	Definition
Angle		Two rays with a common endpoint
Diagonal line segment		
Horizontal line segment		
Intersecting line segments		
Line		An infinite set of points forming a straight path that extends in two directions
Line segment		A part of a line with 2 endpoints
Parallel		
Perpendicular		
Point		An exact location indicated with a dot.
Ray		
Skew		
Vertex (Vertices is plural)		The point that two segments or rays intersect.
Vertical line segment		

Angles

Angles are made up of two rays with a common endpoint, called the vertex. Rays are named starting with the endpoint and then another point on the ray. Ray $\vec{BA}$ and ray $\vec{BC}$ share a common endpoint (B). Notice that both rays are named starting with B.

| Point B is called the:		The sides of the angle are:
Vertex		$\vec{BA}$ and $\vec{BC}$

Angles are usually named by three capital letters. The middle letter names the **Vertex**. If only one angle is located at a vertex, then the angle can be named using the vertex letter alone. And if there is a lower case letter between the two sides, the angle can also be referred to using the lower case letter.

The angle above can be named: ∠B   ∠ABC ∠CBA   ∠x

ANGLE MEASURES A protractor is used to measure angles. The protractor is divided evenly into a half circle of 180 degrees (180°). When the middle of the bottom of the protractor is placed on the vertex, and one of the rays of the angle is lined up with 0°, the other ray of the angle crosses the protractor at the measure of the angle. The angle below has the ray pointing left lined up with 0° (the outside numbers), and the other ray of the angle crossed the protractor at 55°.
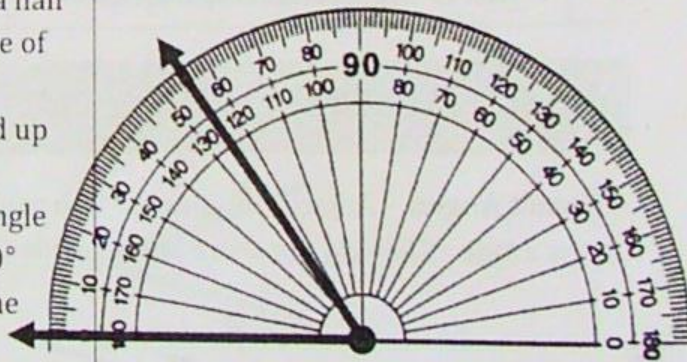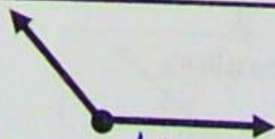
Types of Angles
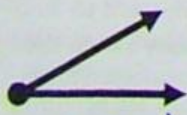
|			
Type **acute**	Type **right**	Type **obtuse**	Type **straight**
Measure **less than 90°**	Measure **90°**	Measure **greater than 90°**	Measure **180°**

Using the protractor below, find the measure of the following angles. Then, tell what type
of angle it is using the information above.

• open left use
  Top #'s.

↑ vertex
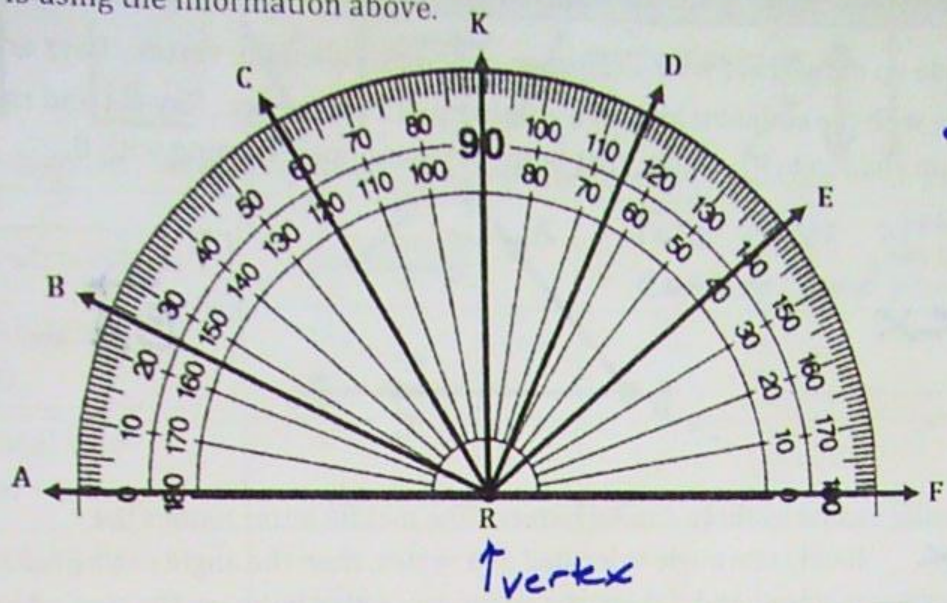
#	Question	Measure	Type of Angle
1	What is the measure of ∡ARF?	180°	Straight
2	What is the measure of ∡CRF?	120°	obtuse
3	What is the measure of ∡DRF?	65°	acute
4	What is the measure of ∡ARD?	115°	obtuse

Adjacent Angles

Adjacent Angles - Adjacent angles are two angles that have the same vertex and share one
ray as a side. They _do not_ share space inside the angles.

Figure A
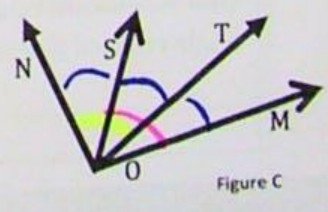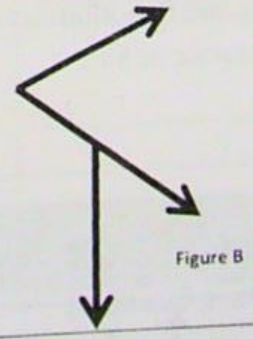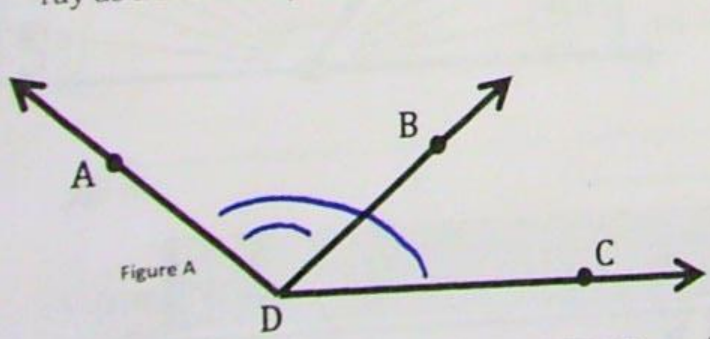
A) ∡ADB is adjacent to ∡BDC.

However, ∡ADB is **not** adjacent to ∡ADC
because adjacent angles _do not_ share any
space inside the angle.

Figure B
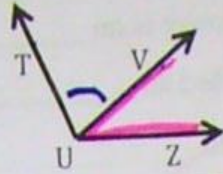
B) These two angles
are not adjacent. They
share a common ray
but do not share the
same vertex.

Figure C

C) ∡NOT is not
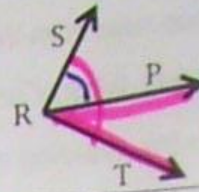adjacent to ∡SOM.
They share space
inside the angles.
(overlap)

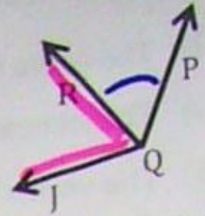For each diagram below, name the angle that is adjacent to it.
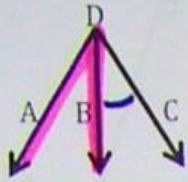
1)
∡CDB is adjacent

to ∡ **ADB**

2)
∡TUV is adjacent

to ∡ **VUZ**

3)
∡SRP is adjacent

to ∡ **PRT**

4)
∡PQR is adjacent

to ∡ **RQJ**

Independent Practice

Part 1: Circle the correct choice for each question.

① Which of the following is not a point on $\overleftrightarrow{AC}$?

    (Y) B   (R) D   (V) A

② Which of the following is not a correct name for this line?

    (A) $\overrightarrow{PQ}$ (L) $\overleftarrow{QP}$ (G) $\overleftarrow{PQ}$

③ Which of the following is not the name of a segment in this figure?

    (O) $\overline{RS}$ (T) $\overleftrightarrow{ST}$ (H) $\overline{TR}$

④ Which of the following is not the name of a ray in this figure?

    (W) $\overrightarrow{EG}$ (S) $\overrightarrow{FG}$ (U) $\overrightarrow{FE}$

⑤ Which of the following is not a correct name for this angle?

    (I) ∠ACB   (Y) ∠CBA   (L) ∠B

⑥ Which of the following is not the name of a line in this figure?

    (G) $\overleftrightarrow{ZX}$ (R) $\overleftrightarrow{XY}$ (K) $\overleftrightarrow{YZ}$

⑦ Which of the following is a segment that has *B* as an endpoint?

    (N) $\overline{CD}$ (C) $\overline{AC}$ (T) $\overline{CB}$

⑧ Which of the following is *not* the name of a ray in this figure?

    (H) $\overrightarrow{MO}$ (S) $\overrightarrow{LM}$ (P) $\overrightarrow{KO}$

⑨ Which of the following is not a correct name for an angle in this figure?

    (M) ∠H   (A) LGHF   (D) ∠EHG