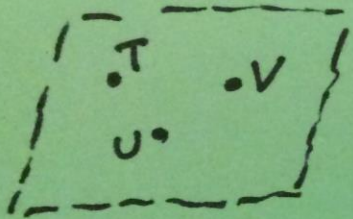


Coplanar



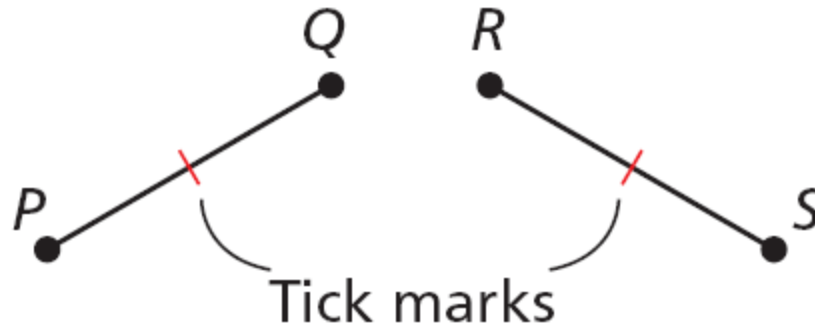
$T, U,$ and V
are coplanar

points that lie on
the same plane

midpoint

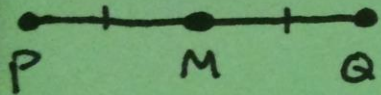
BACK OF FOLDABLE

Congruent segments are segments that have the same length. In the diagram, $PQ = RS$. **Tick marks** are used in a figure to show segments of equal length.



Midpoint

Coplanar

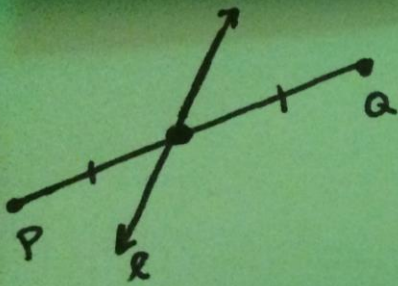


point M is the
midpoint of \overline{PQ}
 $PM = MQ$
↓
"the length of PM"

point that divides a
segment into two
segments of equal length

Segment bisector

Segment Bisector



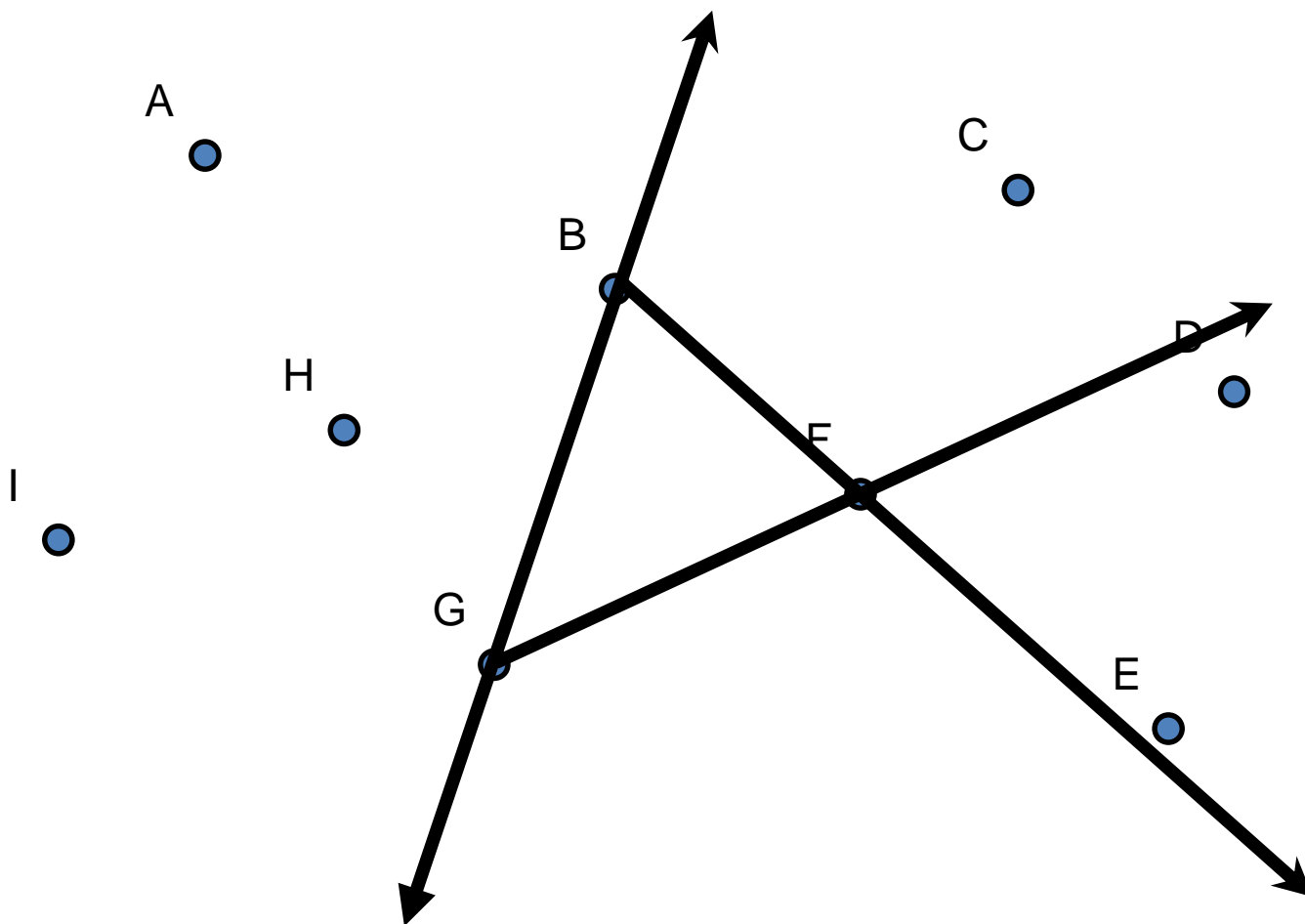
line l bisects
 \overline{PA}

A line, ray, or other
figure that passes
through the midpoint
of a segment

angle

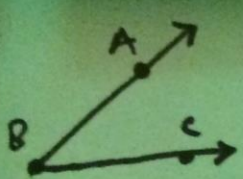
WHAT IS AN ANGLE?

Naming Angles



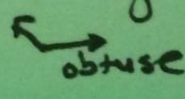
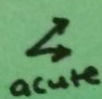
Angle

Segment bisector



$\angle ABC$
 $\angle CBA$
 $\angle B$

} vertex must be
in the middle
when you name
angles!

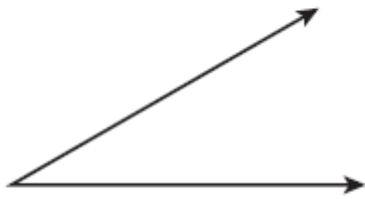


A figure formed by two rays with the same endpoint. The common endpoint is called the vertex of the angle. The rays are the sides of the angle.

Angle bisector

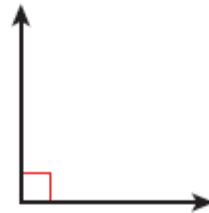
Types of Angles

Acute Angle



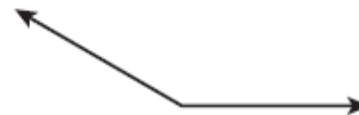
Measures greater than 0° and less than 90°

Right Angle



Measures 90°

Obtuse Angle



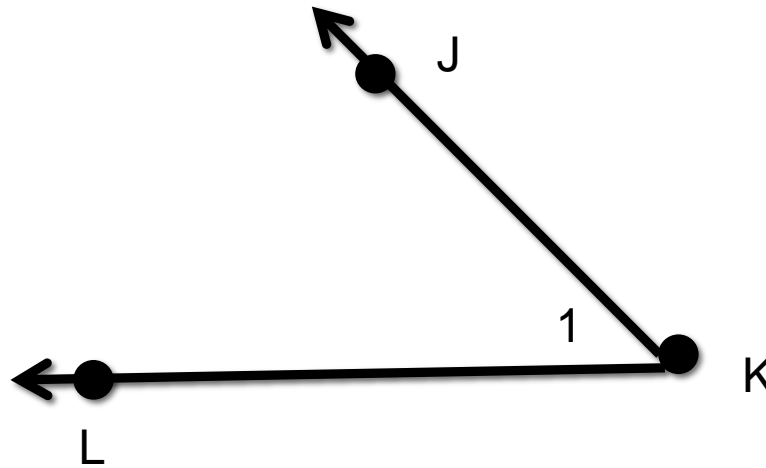
Measures greater than 90° and less than 180°

Straight Angle



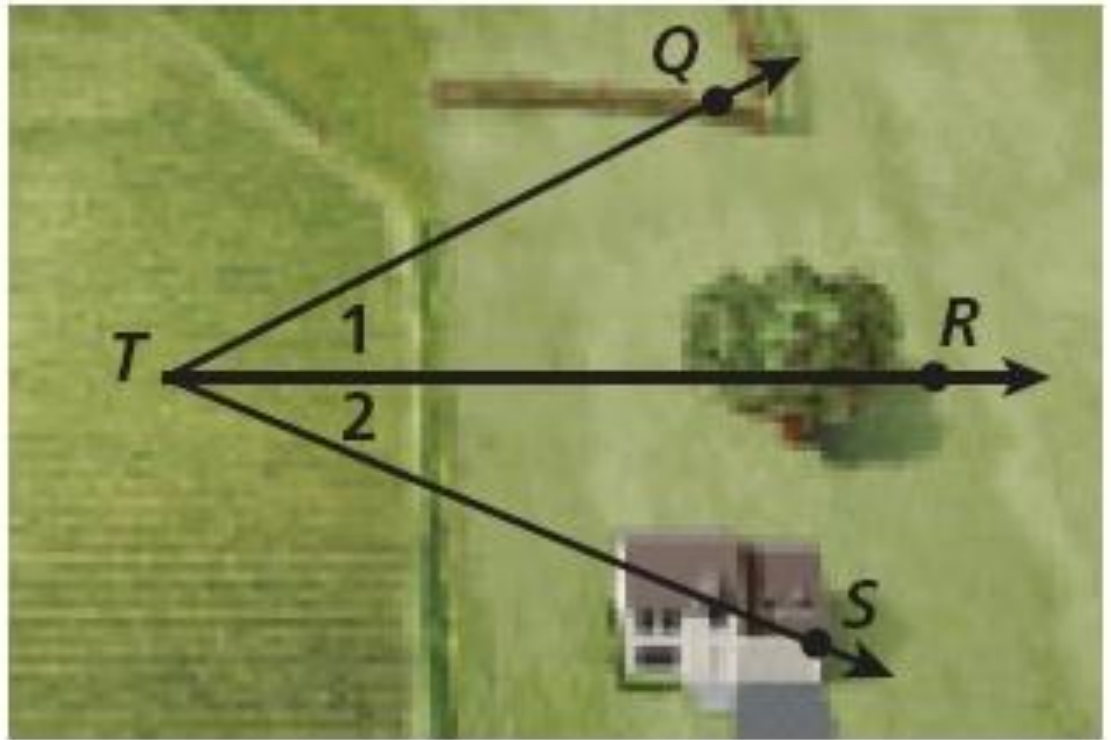
Formed by two opposite rays and measures 180°

Give Four Ways to Name this Angle



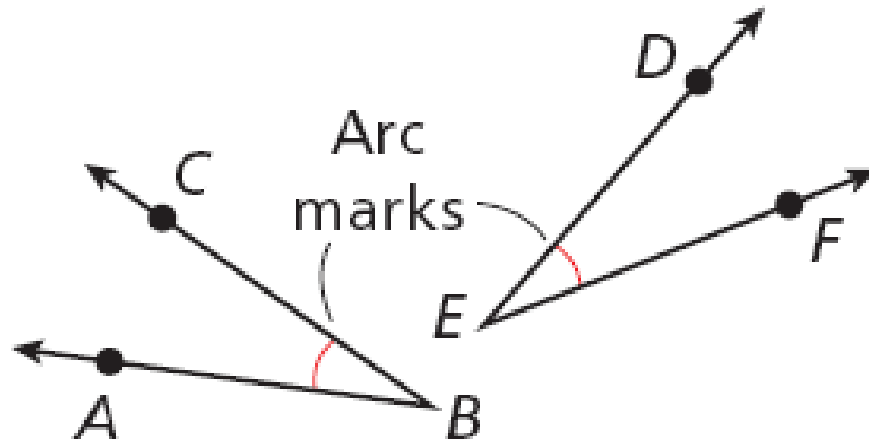
**Write the different ways
you can name the angles
in the diagram.**

$\angle RTQ$, $\angle STR$,
 $\angle 1$, $\angle 2$



On back of foldable!

Congruent angles are angles that have the same measure. In the diagram, $m\angle ABC = m\angle DEF$. *Arc marks* are used to show that the two angles have equal measures.



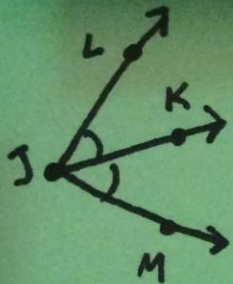
A Distinction!

$\angle ABC$ refers to the angle

$m\angle ABC$ refers to the
measurement of the angle

Angle Bisector

angle



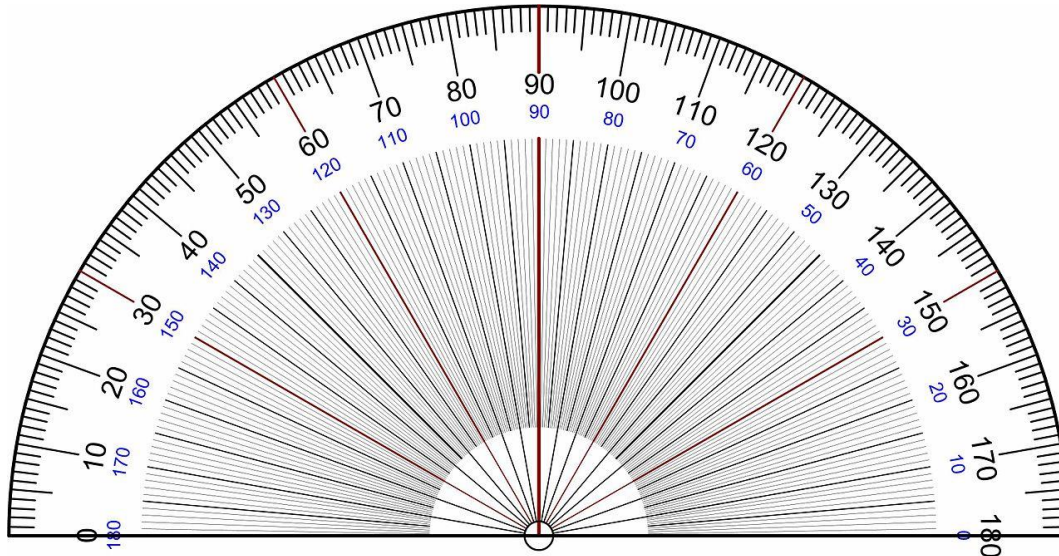
\vec{JK} bisects $\angle LJM$
 $m\angle LJK = m\angle KJM$
↳ "the measure of angle LJK"

A ray that divides an angle into two congruent angles.

Postulate

Measuring Angles

- The **measure** of an angle is usually given in degrees. Since there are 360° in a circle, one **degree** is $1/360$ of a circle.
- We can use **protractors** to measure angles.



Let's play with protractors!

Construct a 50 degree angle.

Construct a 35 degree angle that faces up like a v.

Construct a 120 degree angle.

Postulate

(see back)

a statement that is
accepted without
proof

Homework

- Worksheet