In mathematics, an exact fixed location is called a **point**. We use dots to mark points.

points

These four dots represent four different _____.

We use capital letters to name points.

Z

These are points **X**, **Y**, and _____.

points

These dots represent two _____ named **F** and **G**.

G

We now show a straight path connecting the points **F** and _____.

The straight path is called a **line segment**.

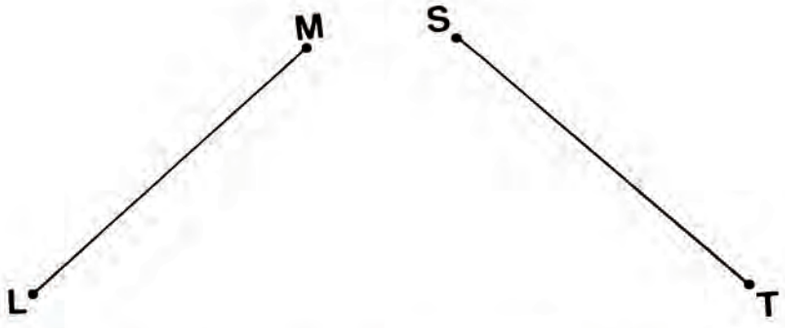
segment

The points **F** and **G** are called the **endpoints** of the line _____.

To name a line segment, we use the names of its endpoints.

line

This is _____ segment **HK**. We write this segment using the notation $\overline{\mathbf{HK}}$.



line

The drawings represent two _____ segments.

segment

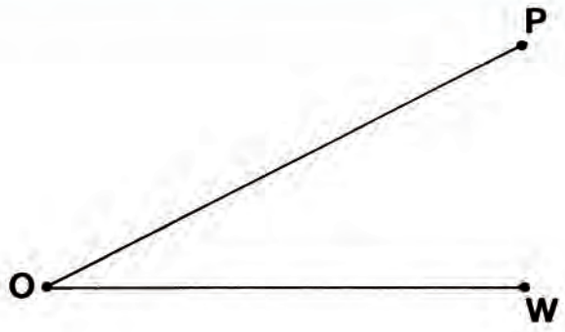
Each line _____ contains two endpoints.

endpoints

We use the letters that name its _____ to name a line segment.

$\overline{ST}$

The names of the line segments are $\overline{LM}$ and _____.



$\overline{OW}$

Line segments $\overline{OP}$ and _____ share the endpoint **O**.

segments

Line _____ that have a common endpoint form an **angle**.

angle

The line segments are called the sides of the _____.

endpoint

Their common _____ is called the **vertex** of the angle.

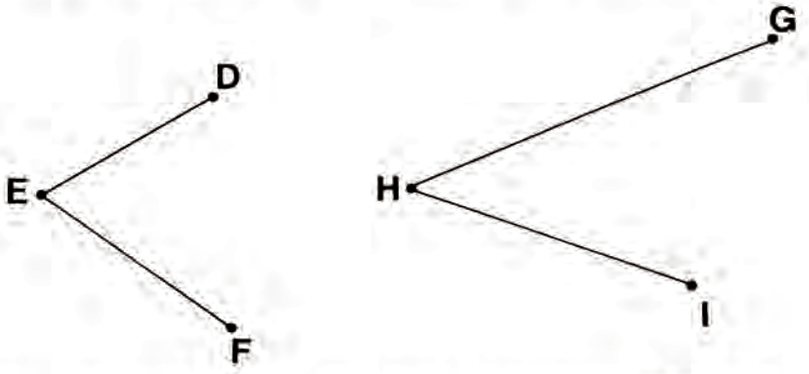
O

The vertex of the above angle is the endpoint _____.

$\overline{OP}$

The sides of the angle are the line segments _____ and $\overline{OW}$.

To refer to an angle, we will use the name of its vertex.



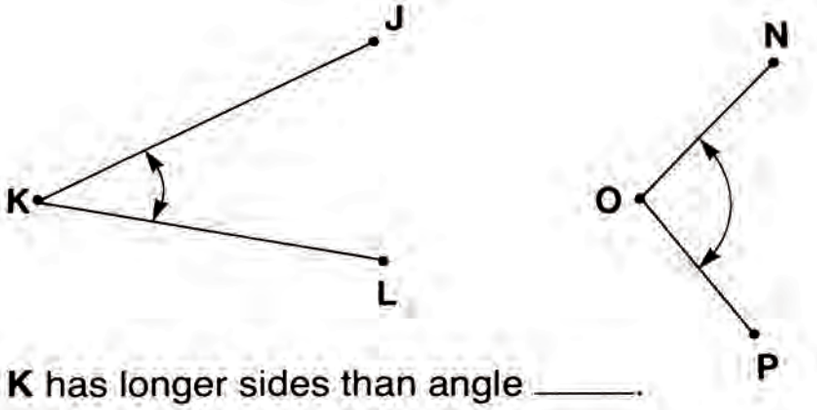
$\overline{EF}$

The sides of angle **E** are the line segments $\overline{ED}$ and _____.

angle

The sides of _____ **H** are the line segments $\overline{HG}$ and $\overline{HI}$.

The size of an angle does not depend on the length of its sides. It depends on the opening between the sides.

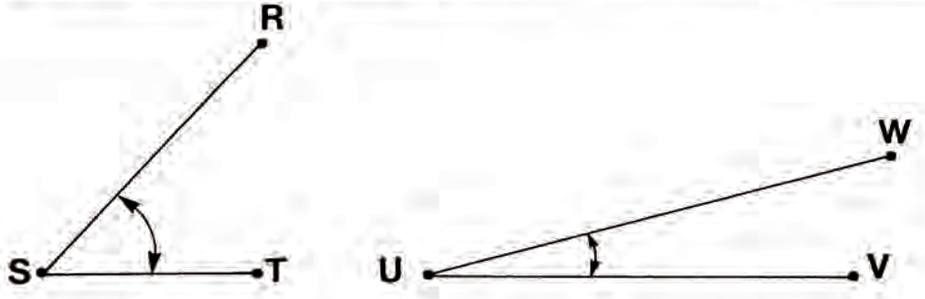


O

Angle **K** has longer sides than angle _____.

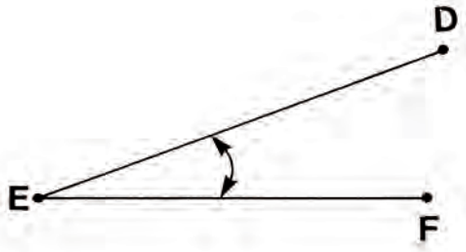
K

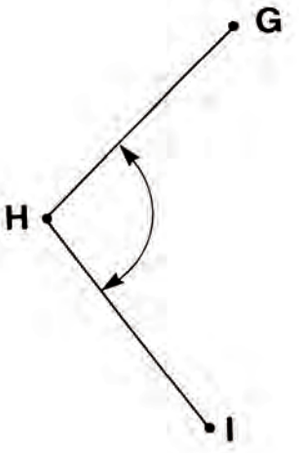
But angle **O** is larger than angle _____.



S , **U**

Angle _____ is larger than angle _____.





angle **E**

Which angle is smaller? angle **E** / angle **H**

$\overline{\mathbf{KL}}$

Line segments $\overline{\mathbf{JK}}$ and _____ share the endpoint **K**.

Think of point **K** as the vertex of an angle.

$\overline{\mathbf{JK}}$

The line segments _____ and $\overline{\mathbf{KL}}$ then become the sides of the angle.

We will call an angle whose sides form a straight line through the vertex a **straight angle**.

straight

Point **K** is the vertex of a _____ angle.

angle

Angles are measured in **degrees**. A degree is $\frac{1}{180}$ of a straight _____.

degrees

A straight angle has a measure of 180 _____.