

# Rays and Angles

Prepared by Title V Staff:  
Daniel Judge, Instructor  
Ken Saita, Program Specialist

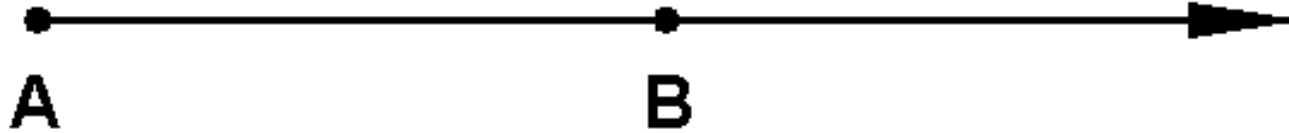
East Los Angeles College

Click one of the buttons below  
or press the enter key

BACK

NEXT

EXIT

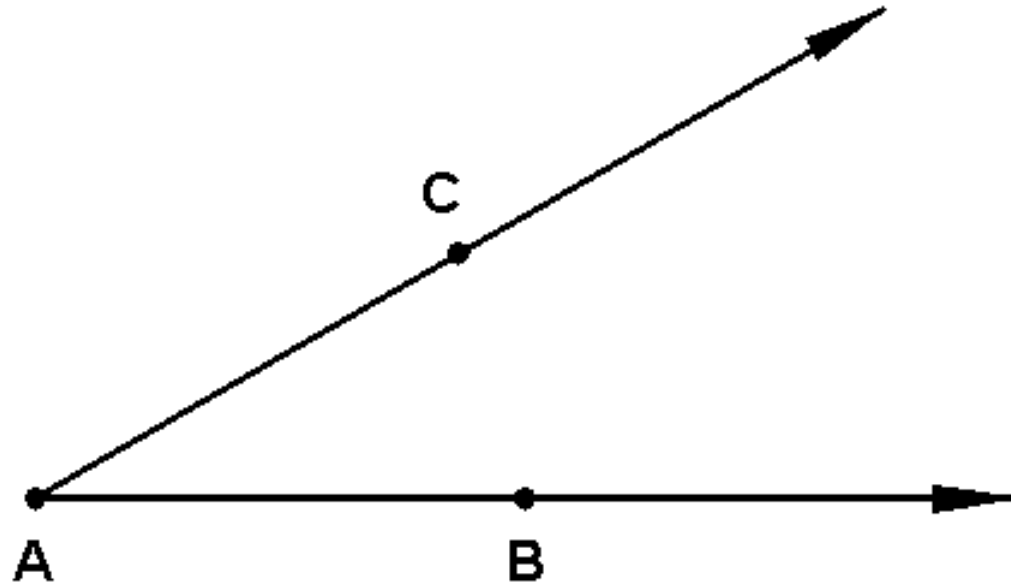


Ray – A line that starts at one point and extends indefinitely through another point.

BACK

NEXT

EXIT



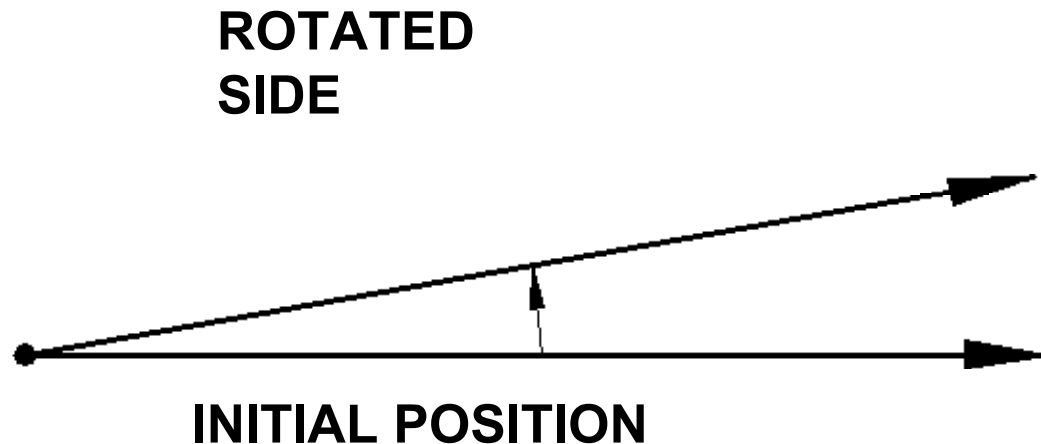
Angle – The union of two rays that share a common endpoint (vertex).

BACK

NEXT

EXIT

*Fact:* We can also think of an angle as being formed by rotating one ray away from the its initial position.

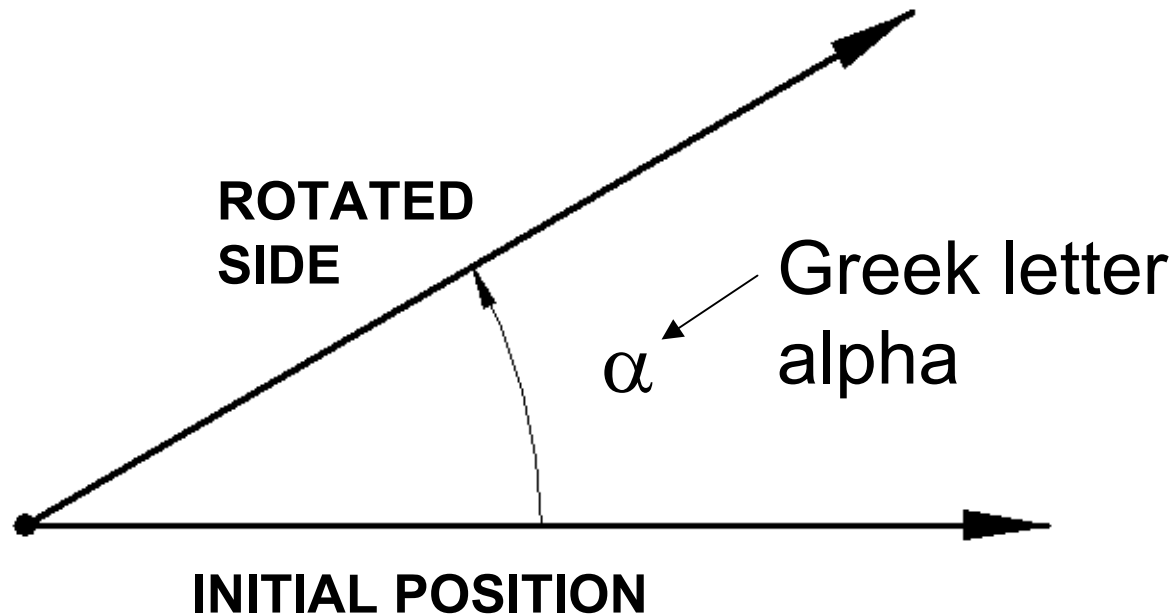


BACK

NEXT

EXIT

The angle formed is indicated by a letter, often times by a Greek letter.

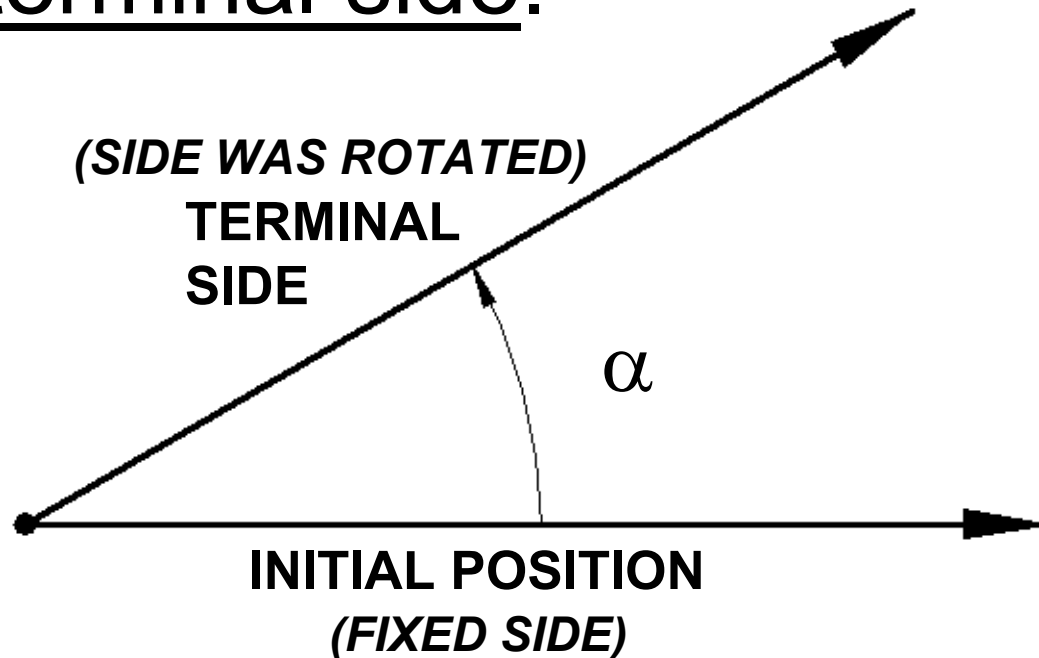


BACK

NEXT

EXIT

- The initial position is formally known as the initial side.
- The rotated side is formally known as the terminal side.



BACK

NEXT

EXIT

To indicate the measure of angle  $\alpha$   
we use the notation  $m(\alpha)$ .

BACK

NEXT

EXIT

In trigonometry, we often use two systems of measurement:

1) Degree (ancient)

Based on a circle

2) Radian (modern)

Based on the unit circle

Ancient mathematicians divided one complete rotation into 360 parts.  
Each part was called a degree.

BACK

NEXT

EXIT

Modern mathematicians measure angles by placing a circle at the vertex of an angle and measuring the length of the arc between the two sides of the angle. A length equal to the radius is called a *radian*.

Since the circumference equals  $2\pi r$ , there are  $2\pi$  radians in a complete rotation.

# End of Rays and Angles

BACK

NEXT

EXIT

# End of Rays and Angles

Title V

East Los Angeles College  
1301 Avenida Cesar Chavez  
Monterey Park, CA 91754  
Phone: (323) 265-8784

Email Us At:  
[menteprog@hotmail.com](mailto:menteprog@hotmail.com)

Our Website:  
<http://www.matematicamente.org>

BACK

NEXT

EXIT