PreCalculus **Name**_____
Notes: 6.1 Law of Sines **Date**_____ **Block**____

Oblique Triangles:

_____

_____

Law of Sines can be used to solve a triangle when you're given:

_____

_____

Formula:

Use the Law of Sines to solve each triangle.

1. $C = 102°$
   $B = 29°$
   $b = 28$ feet

2. $A = 43°$
   $c = 22$
   $B = 98°$

The Ambiguous Case:
Three possible solutions can occur: **1.) _____**

2.) _____

3.) _____

Use the Law of Sines to solve each triangle.

3.

a = 22 inches	a = 22 inches
b = 12 inches	b = 12 inches
c =	c =
A = 42°	A = 42°
B =	B =
C =	C =

(if needed)

4.

a = 15	a = 15
b = 25	b = 25
c =	c =
A = 85°	A = 85°
B =	B =
C =	C =

(if needed)

5.

$a = 12$ meters	$a = 12$ meters
$b = 31$ meters	$b = 31$ meters
$c =$	$c =$
$A = 20.5°$	$A = 20.5°$
$B =$	$B =$
$C =$	$C =$

(if needed)

6.

$a =$	$a =$
$b = 46$	$b = 46$
$c = 29$	$c = 29$
$A =$	$A =$
$B =$	$B =$
$C = 31°$	$C = 31°$

(if needed)

7. The course for a boat race starts at point A in the figure shown below and proceeds in the direction S 52°W to point B, then in the direction S 40°E to point C, and finally back to A. Point C lies 8 kilometers directly south of point A. Approximate the total distance of the race course.