


Unit 4 - Oblique Triangles

10/5-10/15

Date	Topic/Video	Assignment	What is due? Send to Blankenbecler.classroom@gmail.com By midnight
Monday, 10/5	Solving Right Triangles Video	WS #1	
Tuesday, 10/6	Law of sines Video	WS #2	
Wednesday, 10/7	Catch up day		WS #1/#2 include Interactive Notebook pages
Thursday, 10/8	Law of Sines (ambiguous) Video	WS #3	
Friday, 10/9	Law of Cosines Video	WS #4	
Monday, 10/12	Area of a triangle Video	WS #5	
Tuesday, 10/13	Review	WS #6 Review	
Wednesday, 10/14	DM review	Delta Math Assignment	WS #3-6 include Interactive Notebook pages
Thursday, 10/15	Test	Delta Math Test	

Example: Find the angles of $\triangle ABC$.




1. Start by labeling the triangle.
($C = 30^\circ$, $b = 14$, $a = 10$)

2. Pick the correct formula.
 $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$

3. Substitute your values.
 $\frac{\sin A}{10} = \frac{\sin 30^\circ}{14}$
 $\sin A = \frac{10 \sin 30^\circ}{14}$
 $\sin A = \frac{10 \cdot 0.5}{14}$
 $\sin A = \frac{5}{14}$
 $A \approx 20.7^\circ$

Example: Find the angles of $\triangle ABC$.



1. Start by labeling the triangle.
($A = 30^\circ$, $a = 10$, $b = 14$)

2. Pick the correct formula.
 $a^2 = b^2 + c^2 - 2bc \cos A$

3. Substitute your values.
 $10^2 = 14^2 + c^2 - 2(14)c \cos 30^\circ$

4. Solve.
 $100 = 196 + c^2 - 28c \cos 30^\circ$
 $100 = 196 + c^2 - 24.25c$
 $c^2 - 24.25c + 96 = 0$

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

Law of Sines

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$b^2 = a^2 + c^2 - 2ac \cos B$$

$$c^2 = a^2 + b^2 - 2ab \cos C$$

Law of Cosines