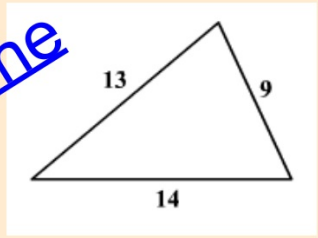
Welcome Back MYP Math 9

	Assignment Effort Grade (Circle One)	Comments (What was interesting or challenging?)
Monday Date: 10/9 Topic: No HW - Unit 1 Test Friday	0 1 2	
Tuesday Date: 10/10 Topic: Pythagorean Thm. Practice	0 1 2	
Wednesday Date: 10/11 Topic: 8A: Distance	0 1 2	
Thursday Date: 10/12 Topic: 8A: Right, obtuse, acute triangles	0 1 2	
Friday Date: _____ Topic: _____	0 1 2	

Class Plan:

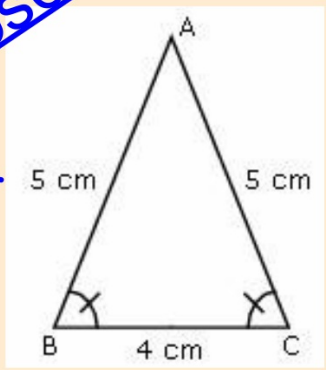
1. Warm-up
2. Classify Triangles using Side Lengths
3. Practice

Scalene

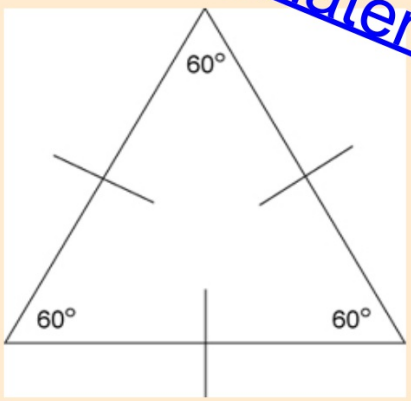


How can we use the distance formula to classify triangles?

Isosceles



Equilateral



Period 1	10:05-10:35
Period 2	10:40-11:10
Period 3	11:15-11:45
Period 4	11:50-12:20
Period 5	12:25-1:50
A Lunch	12:25-12:55
A Class	1:00-1:50
B Class	12:25-1:15
B Lunch	1:20-1:50
Period 6	1:55-2:25
Period 7	2:30-3:00

Late Start Dates

October 12	February 8
November 9	March 8
December 7	April 12
January 11	May 10

Classifying Triangles by Side Lengths

Scalene:

A triangle with all sides of different lengths.

Equilateral:

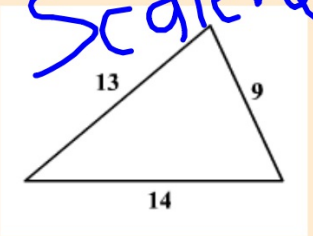
A triangle with all three sides of equal lengths.

Isosceles:

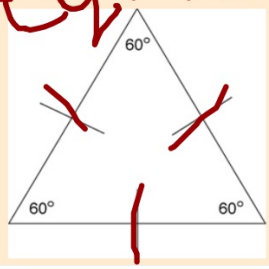
A triangle with atleast two sides of equal length.

Label Triangles Below:

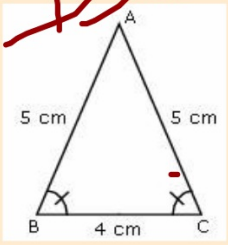
Scalene



Equilateral

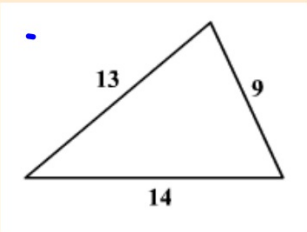


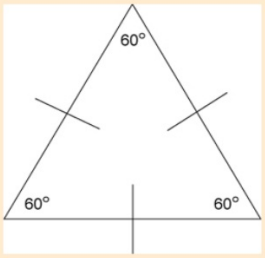
Isosceles

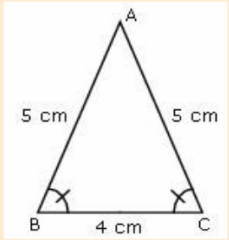


Do: Classify Triangles using the Distance Formula

1. Plot points.
2. Draw triangle
3. Solve for lengths of each side.
4. Classify the triangle.

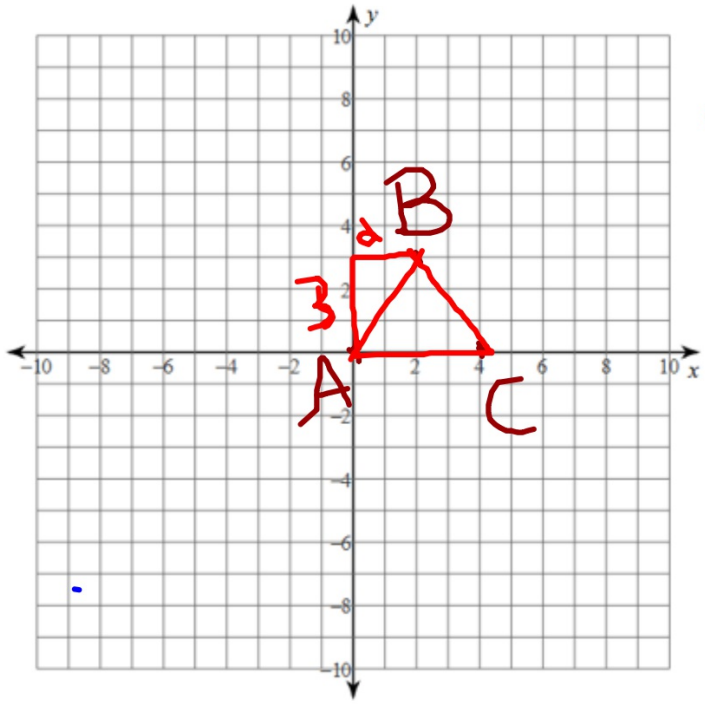






Triangle #1: Classify the triangle

1. A(0,0) B(2,3) C(4,0)



$AB^2 = 2^2 + 3^2$

$AB^2 = 4 + 9 = 13$

$AB = \sqrt{13}$

$BC = ?$

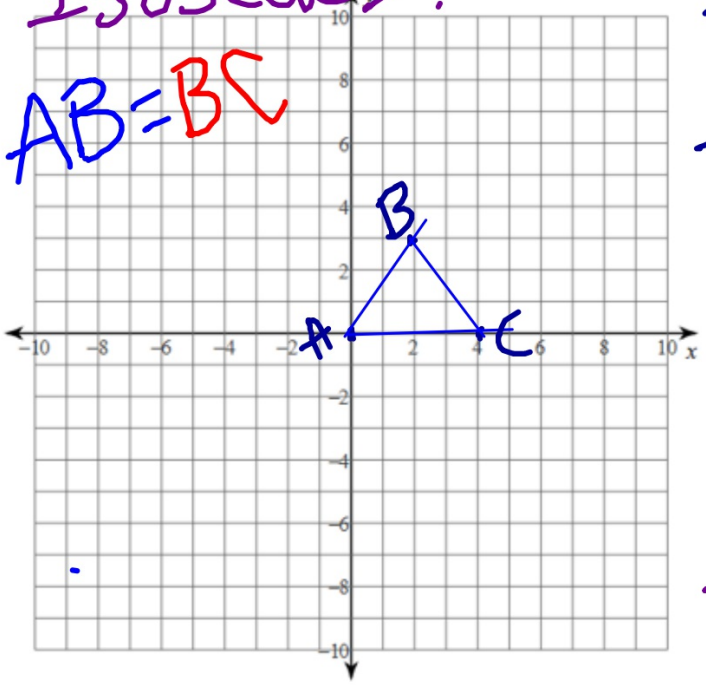
$AC = ?$

Triangle #1: Classify the triangle

1. A(0,0) B(2,3) C(4,0)

Isosceles!

AB=BC



$AB=\sqrt{2^2+3^2}$

$AB=\sqrt{4+9}$

$AB=\sqrt{13}$

$BC=\sqrt{2^2+3^2}$

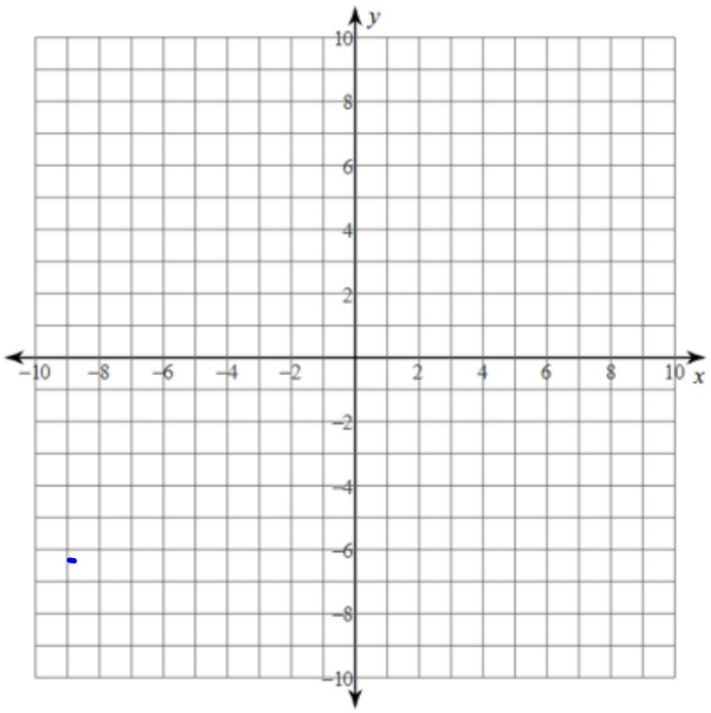
$BC=\sqrt{4+9}$

$BC=\sqrt{13}$

$AC=\sqrt{4^2+0^2}=4$

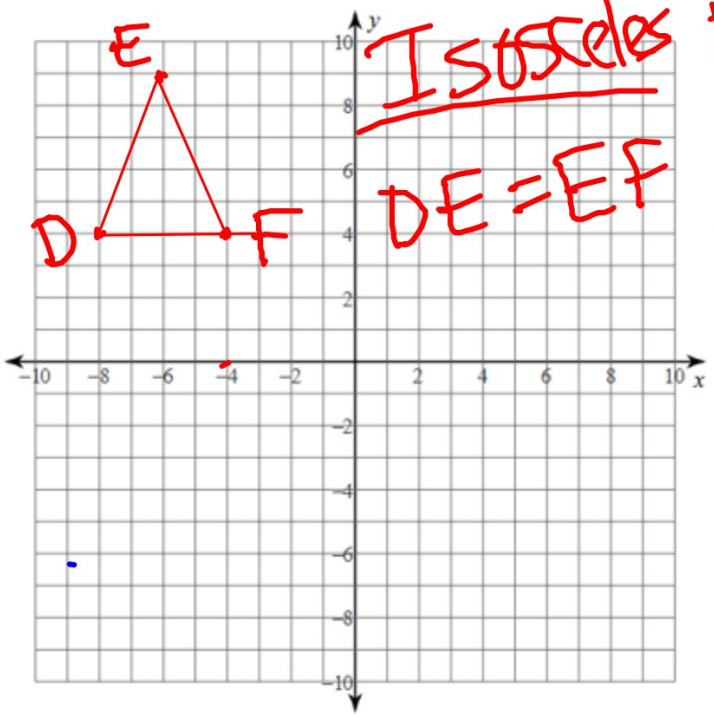
Triangle #2: Classify the triangle

2. D(-8,4) E(-6,9) F(-4,4)



Triangle #2: Classify the triangle

2. D(-8,4) E(-6,9) F(-4,4)



Isosceles

$DE = \sqrt{2^2 + 5^2}$

$DE = \sqrt{29}$

$DE = EF$

$EF = \sqrt{2^2 + 5^2}$

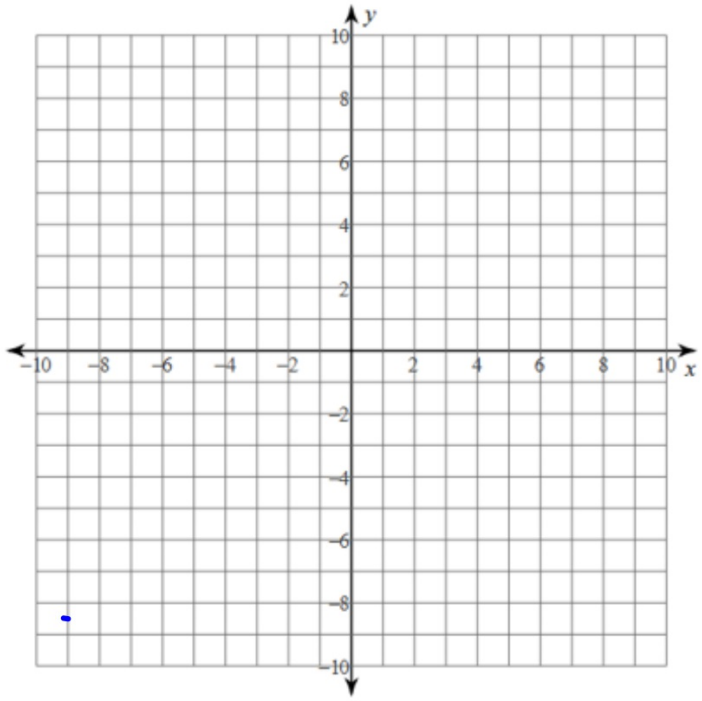
$EF = \sqrt{29}$

$DF = \sqrt{0^2 + 4^2}$

$DF = \sqrt{16} = 4$

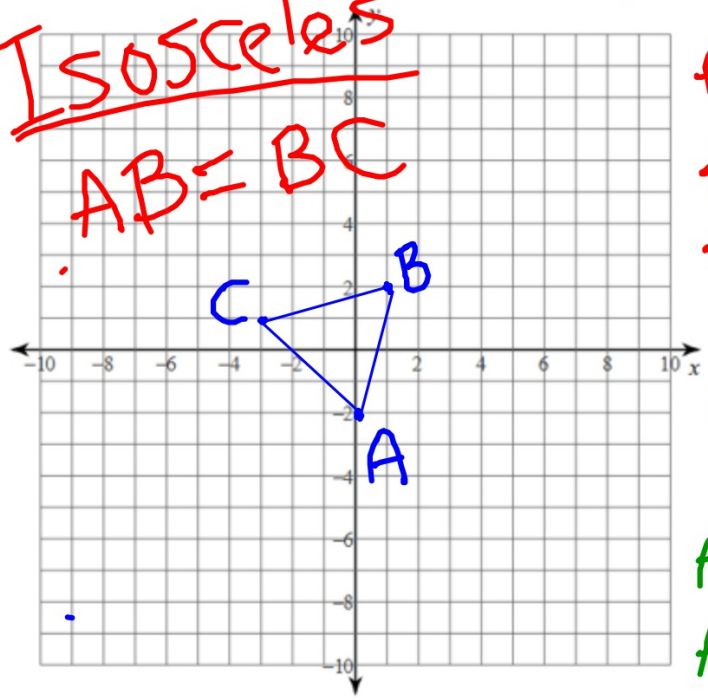
Triangle #3: Classify the triangle

3. A(0,-2) B(1,2) C(-3,1)



Triangle #3: Classify the triangle

3. A(0,-2) B(1,2) C(-3,1)



Isosceles

AB = BC

$AB = \sqrt{(0-1)^2+(-2-2)^2}$

$AB = \sqrt{(-1)^2+(-4)^2}$

$AB = \sqrt{1+16}$

$AB = \sqrt{17}$

$BC = \sqrt{(1--3)^2+(2-1)^2}$

$BC = \sqrt{4^2+1^2}$

$BC = \sqrt{17}$

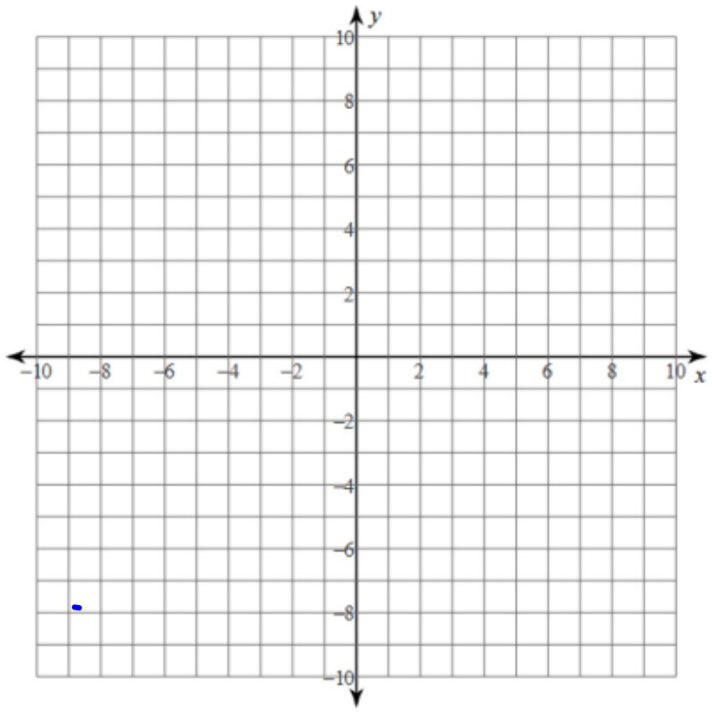
$AC = \sqrt{(-3-0)^2+(1--2)^2}$

$AC = \sqrt{(-3)^2+(3)^2}$

$AC = \sqrt{9+9} = \sqrt{18} = 3\sqrt{2}$

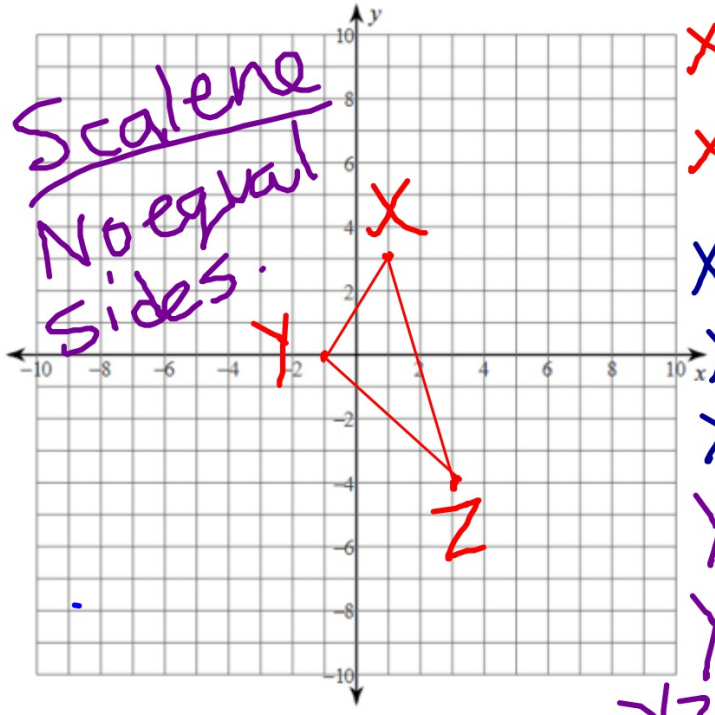
Triangle #4: Classify the triangle

4. X(1,3) Y(-1,0) Z(3,-4)



Triangle #4: Classify the triangle

4. X(1,3) Y(-1,0) Z(3,-4)



Scalene
No equal sides.

$XY = \sqrt{(1--1)^2 + (3-0)^2}$

$XY = \sqrt{2^2+3^2}$

$XY = \sqrt{4+9} = \sqrt{13}$

$XZ = \sqrt{(1-3)^2+(3--4)^2}$

$XZ = \sqrt{(-2)^2+(7)^2}$

$XZ = \sqrt{4+49} = \sqrt{53}$

$YZ = \sqrt{(-1-3)^2+(0--4)^2}$

$YZ = \sqrt{(-4)^2+(4)^2}$

$YZ = \sqrt{16+16} = \sqrt{32}$

Quiz Rubric for Friday

7 8	• Select appropriate mathematics when solving **challenging problems in both familiar and unfamiliar situations.** • Apply the selected mathematics successfully when solving these problems. • Generally solve these problems correctly.			• All problems are solved ***without error*** and detailed work. (8) • Missing side lengths found -Hypotenuse -Leg • Distance found -Algebraically -Shown graphically • Triangle classified -Right, Acute, Obtuse -Equilateral, Isosceles, Scalene

Exercises...

Finish Handout AND al handouts for the week!

Study for your Quiz!