Warm Up 3/1/19

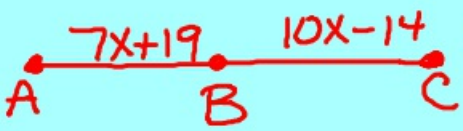
1.Use the following to fill in the blanks:

B is the midpoint of AC

AB= 7x + 19 and BC= 10x - 14

x= 11 AB= 96 BC= 96 AC= 192

(AC) 96+96=192



(AB) 7(11)+19
77+19=96

(BC) 10(11)-14
110-14=96

$7x+19=10x-14$
$-10x \quad -10x$
$-3x+19=-14$
$-19 \quad -19$
$-3x=-33$
$\frac{-3x}{-3}=\frac{-33}{-3}$
$x=11$

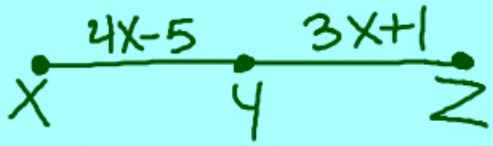
2.Use the following to fill in the blanks:

Y is the midpoint of XZ

XY= 4x - 5 and YZ= 3x + 1

x= 6 AB= 19 BC= 19 AC= 38

19+19

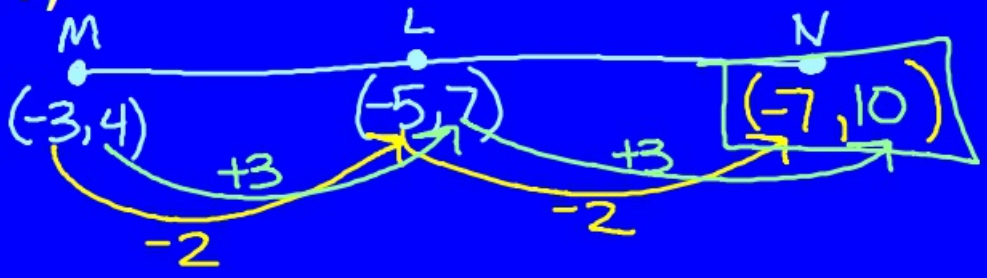


$4(6)-5=19$
$3(6)+1=19$

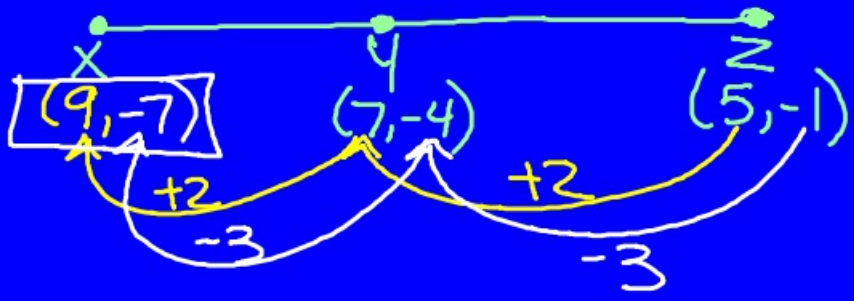
$4x-5=3x+1$
$-3x \quad -3x$
$x-5=1$
$+5 \quad +5$
$x=6$

MISSING ENDPOINT
"Swoop Swoop" Method

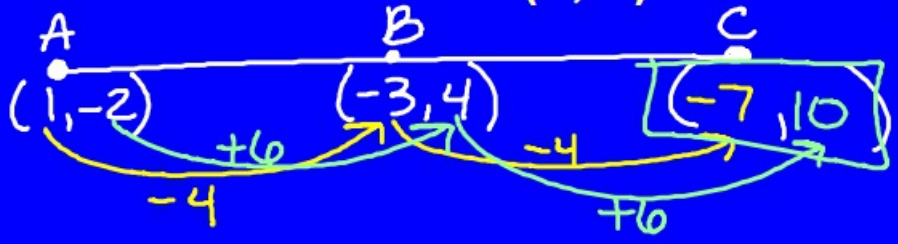
1. Point L is the midpoint of MN. Find the coordinate for N if M is (-3,4) and L is (-5, 7)



2. Point Y is the midpoint of XZ. Find the coordinate for X if Y is (7, -4) and Z is (5, -1)



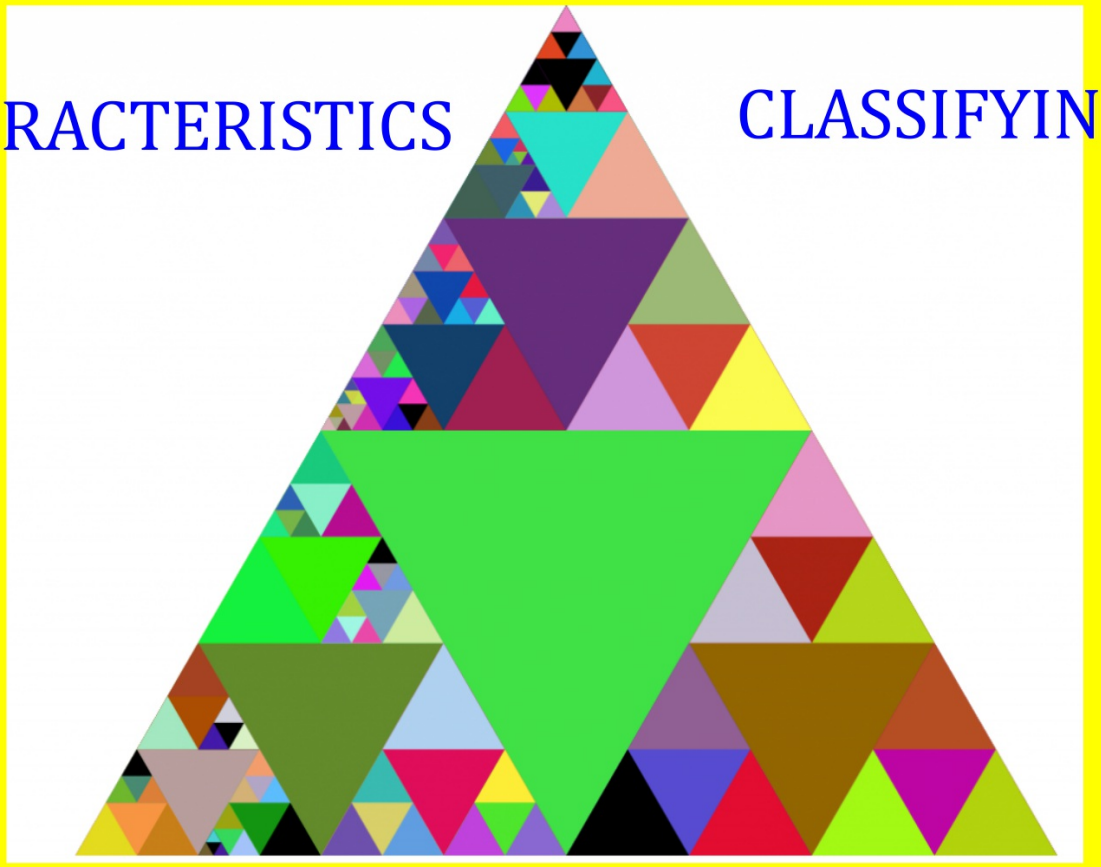
3. Point B is the midpoint of AC. Find the coordinate for C if A is (1,-2) and B is (-3,4)



TRIANGLES:

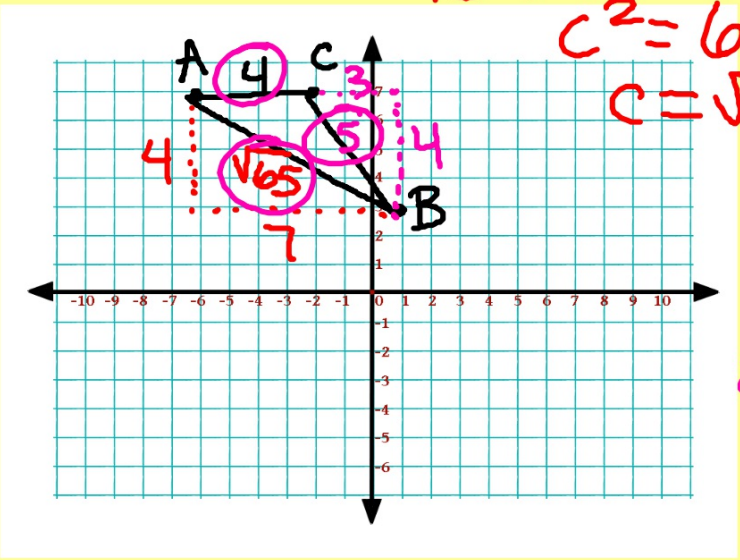
CHARACTERISTICS

CLASSIFYING



Perimeter:

Given a triangle with vertices A (-6,7) B(1,3) and C(-2, 7)
What is the approximate perimeter? Round to the nearest hundredth.



$4^2+7^2=c^2$
$16+49=c^2$
$c^2=65$
$c=\sqrt{65}$

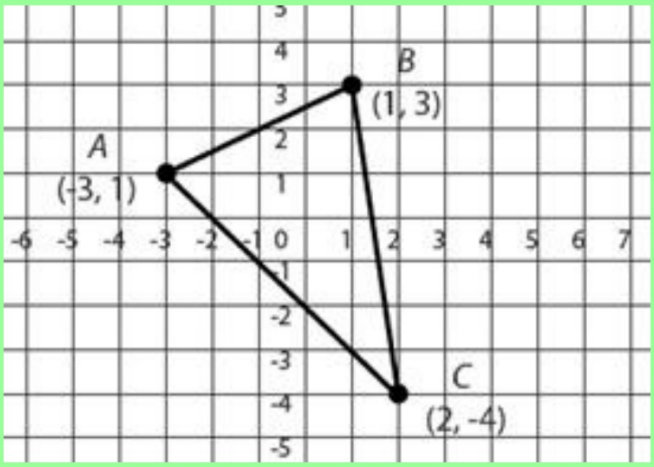
How do you calculate the perimeter of ANY shape?

$3^2+4^2=c^2$
$9+16=c^2$
$c^2=25$
$c=5$

$4+5+\sqrt{65}$
17.06

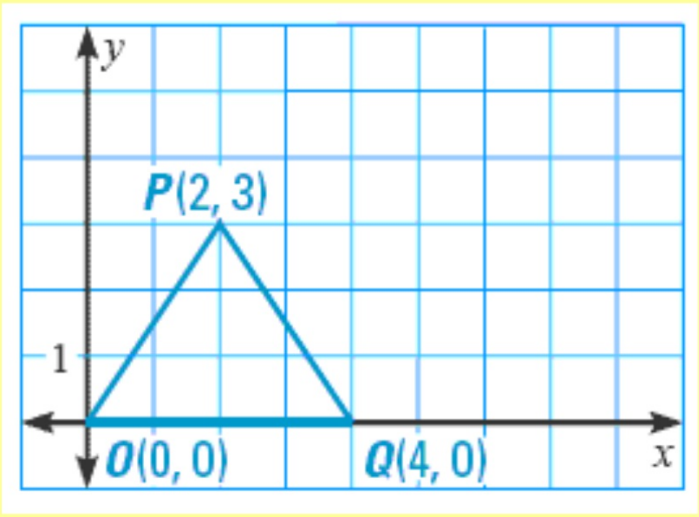
Perimeter:

Given a triangle with vertices A (-3,1) B (1,3) and C (2, -4). Calculate the perimeter of the triangle. Round to the nearest hundredth.



Area:

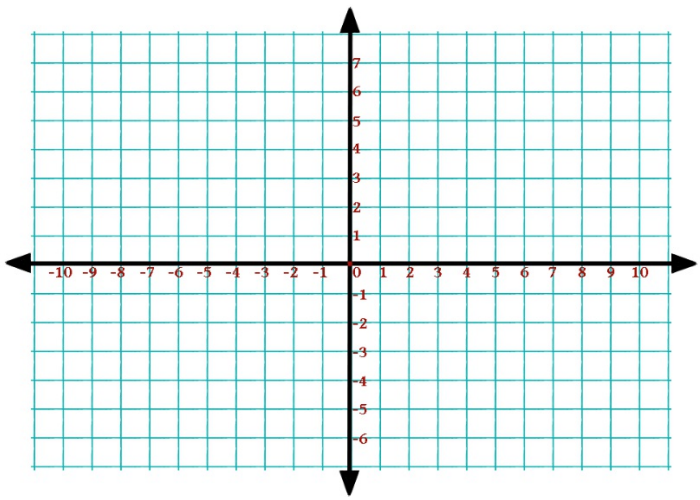
Determine the area of triangle OPQ.



How do you calculate the area of a triangle?

Area:

Given a triangle with vertices X(2, -5) Y(2, 7) and Z (6, 7).
Calculate the area of the triangle.



Classifying Triangles:

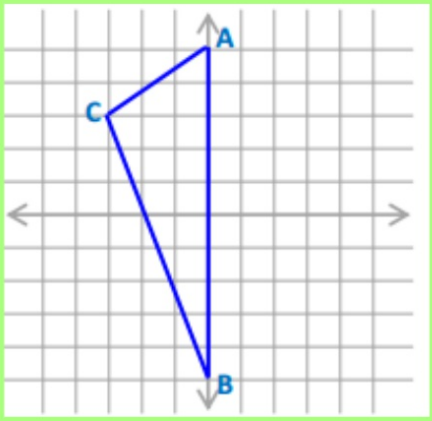
Triangles can be classified by their side lengths.

Match each triangle to the appropriate description.

Equilateral	The lengths of at least two sides are the same.
Isosceles	All 3 sides have different lengths.
Scalene	All three side lengths are the same.

Remember: LENGTH = DISTANCE

Use the side lengths to prove that triangle ABC is scalene.

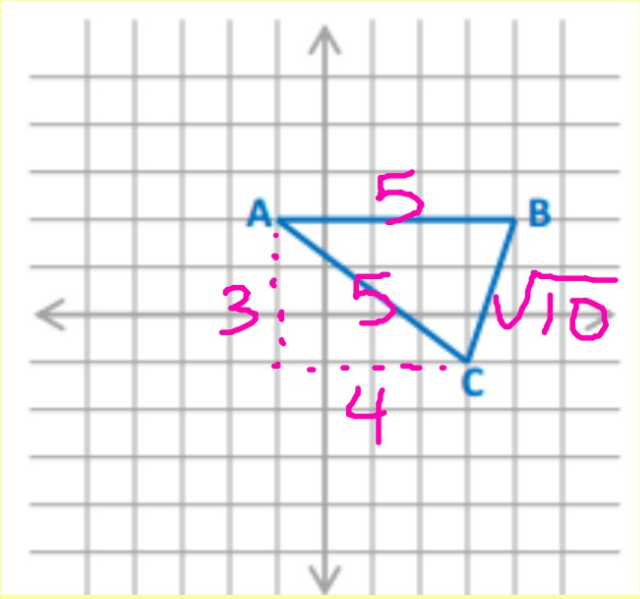


length AB =

length BC =

length CA =

Given triangle ABC, classify it as equilateral, isosceles, or scalene.



$$2^2 + 4^2 = c^2$$
$$4 + 16 = c^2$$
$$c^2 = 20$$
$$c = \sqrt{20}$$