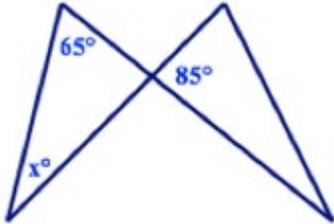


Unit ___ Geo 2
Geometry 1-2
Triangle Basics Review Part 1

Name _____
Date _____ Period _____

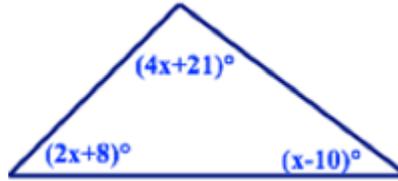
Level 1:

1. Solve for the variable.



x = _____

2. Find the value of x and classify the triangle by its angles.

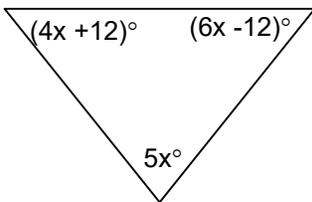


x = _____, classification _____

3. Can the given side lengths form a triangle? Show your work or explain your answer.

7, 8, 15

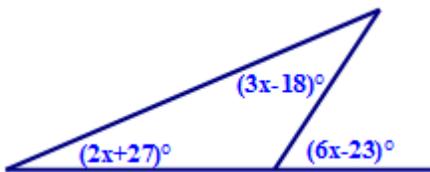
4. Find the value of x and classify the triangle by its sides.



x = _____, classification _____

Level 2:

5. What is the value of x?



x = _____

6. There are three baseball parks in Springfield. The Springfield little league is planning a baseball tournament and needs to use two of the parks. They want to use the two parks closest to each other. Which two parks are closest to each other?

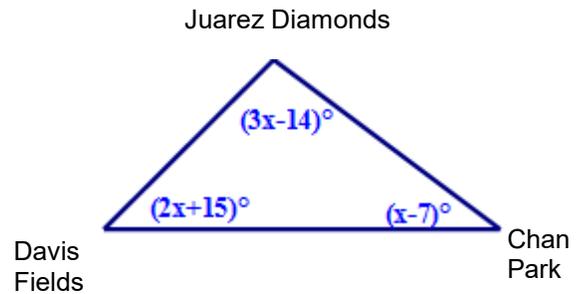
$x =$ _____

Davis Fields \angle _____

Juarez Diamonds \angle _____

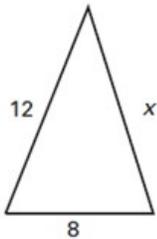
Chan Park \angle _____

shortest distance is from _____ to _____ .
(between which two parks?)

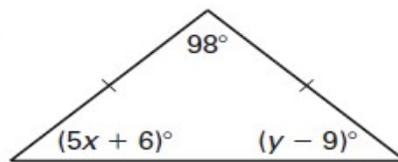


Level 3:

7. Give the range for the possible values of x .

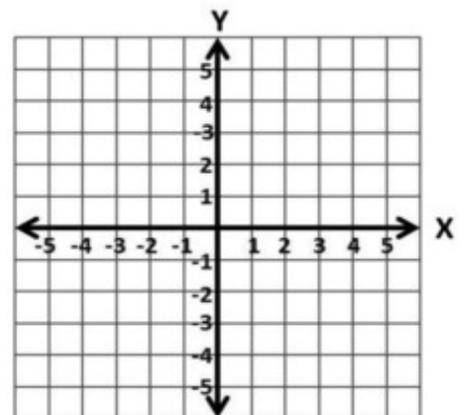


8. Find the values of x and y .



Level 4:

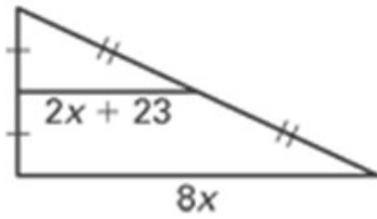
9. First, graph triangle A (1,1), B (-3,3), and C (-3,-3). Then use the Pythagorean Theorem to find the side lengths. Finally, classify the triangle by its sides and determine if it is a right triangle. In complete sentences, describe the steps you took to classify the triangle by its sides and then to decide if it is a right triangle.



Triangle Basics Review Part 2

Level 1:

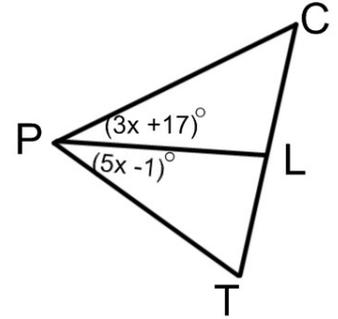
1. Find x .



$x =$ _____

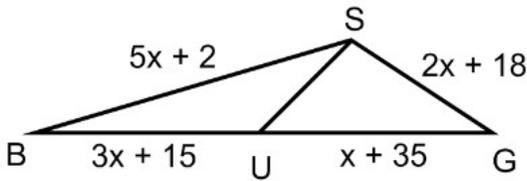
2. \overline{PL} is the angle bisector of $\angle TPC$.

Find x .



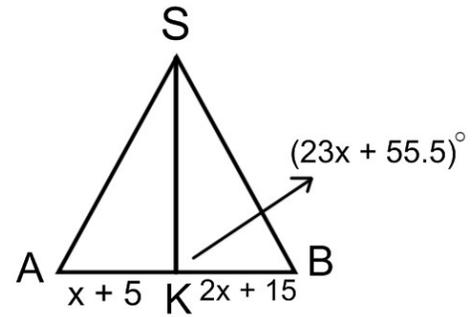
$x =$ _____

3. If SU is a median of $\triangle SGB$, find the perimeter of $\triangle SGB$.



$x =$ _____

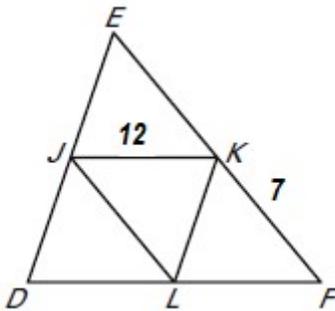
4. \overline{SK} is an altitude, find x .



$x =$ _____

Level 2:

5. In $\triangle DEF$, where J , K , and L are midpoints, $DE = 8x + 12$, $KL = 10x - 9$, and $m\angle LJK = 30^\circ$, find the following:



$x =$ _____

$KL =$ _____

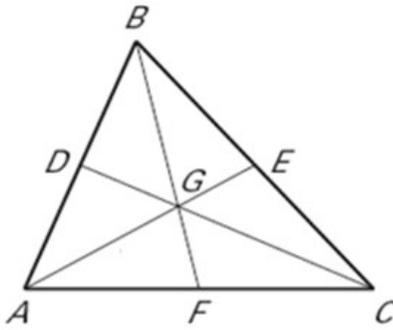
$m\angle DLJ =$ _____

$m\angle FLJ =$ _____

Perimeter of $\triangle JKL =$ _____

Perimeter of $\triangle DEF =$ _____

6. G is the centroid of $\triangle ABC$, $AD = 7$, $AG = 12$, and $CD = 21$. Find the length of each segment.



BD = _____

AB = _____

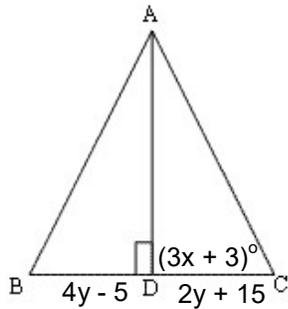
EG = _____

AE = _____

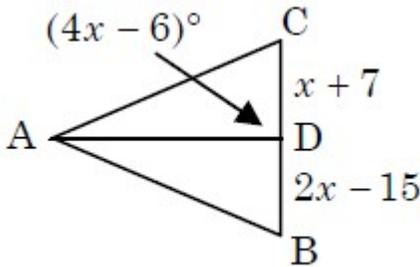
CG = _____

DG = _____

7. AD is a perpendicular bisector for $\triangle ABC$. Find x, y, and BC.

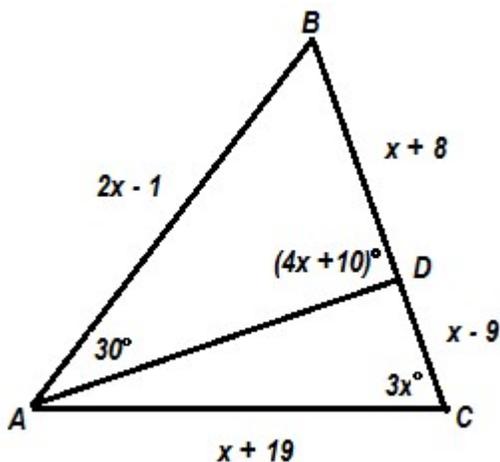


8. Find x, CD and DB, if AD is an altitude of $\triangle ABC$. Based on that, is AD also a perpendicular bisector?



Level 3:

9. If AD is an altitude of $\triangle ABC$, find x, the perimeter, and the area of $\triangle ABC$. Then, classify the triangle by its sides and by its angles.



x = _____

Perimeter of $\triangle ABC$ = _____

Area of $\triangle ABC$ = _____

Classification:

By sides _____

By angles _____