

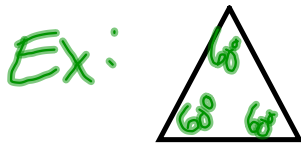
## 4.1 Triangles

### Classification with angles

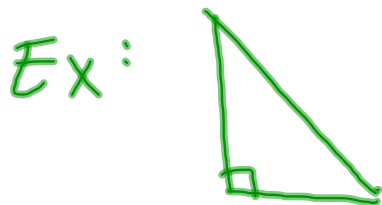
1. Acute: all 3  $\angle$ 's are acute.



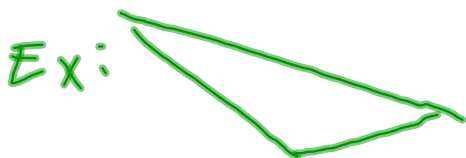
2. Equiangular: All the angles are equal



3. Right: 1 angle is  $90^\circ$



4. Obtuse: 1 angle is obtuse



## Classification by side length

1. Scalene: all sides have different lengths

Ex: 

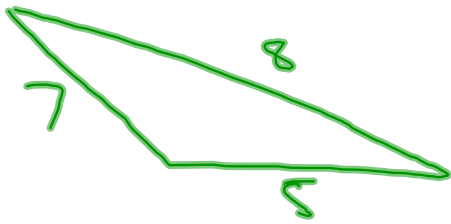
2. Isosceles: Exactly 2 sides are equal.

Ex: 

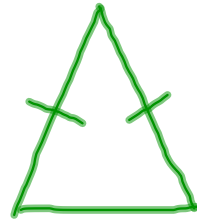
3. Equilateral: All 3 sides are equal.

Ex: 

Ex: Classify each triangle by angle  
& side length.

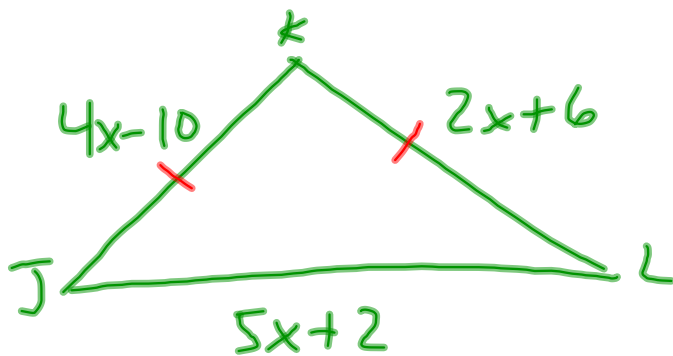


obtuse scalene



Acute Isosceles

Ex: Find  $x$  and  $JL$  for  $\triangle JKL$



$$\begin{array}{r} 4x-10 = 2x+6 \\ +10 \quad +10 \end{array}$$

$$\begin{array}{r} 4x = 2x + 16 \\ -2x \quad -2x \\ \hline \end{array}$$

$$\frac{2x}{2} = \frac{16}{2}$$

$$x = 8$$

$$\begin{aligned} JL &= 5x+2 \\ &= 5 \cdot 8 + 2 \\ &= 42 \end{aligned}$$

Hw: p. 219  
2-38 even, odds  
extra credit