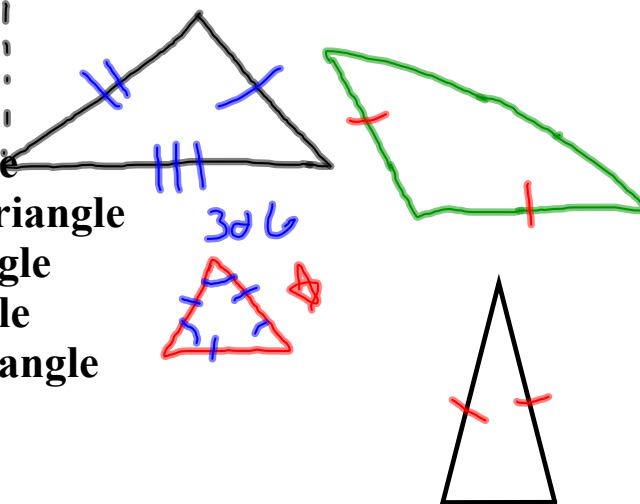


Draw an example of each type of triangle:

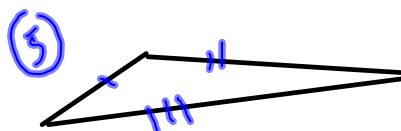
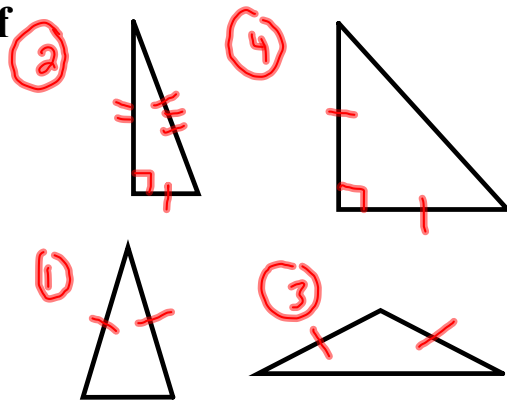
- 1) acute triangle
- 2) obtuse triangle
- 3) equiangular triangle
- 4) isosceles triangle
- 5) scalene triangle
- 6) equilateral triangle



Which 2 triangles from above are the same, but with a different name?

Draw an example of each type of triangle:

- 1) acute isosceles triangle
- 2) right scalene triangle
- 3) obtuse isosceles triangle
- 4) right isosceles triangle
- 5) obtuse scalene triangle
- 6) obtuse equilateral triangle



Which triangle is impossible to draw? Why?

Sec. 4.1 - Classifying Triangles

Classifying by Angles

Acute - all angles less than 90°

Equiangular - all angles = (60°)

Obtuse - 1 angle more than 90°

Right - 1 right angle (90°)

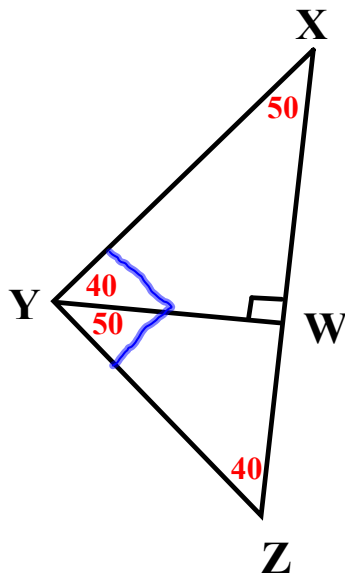
Classifying by Sides

Equilateral - all sides =

Isosceles - 2 sides =

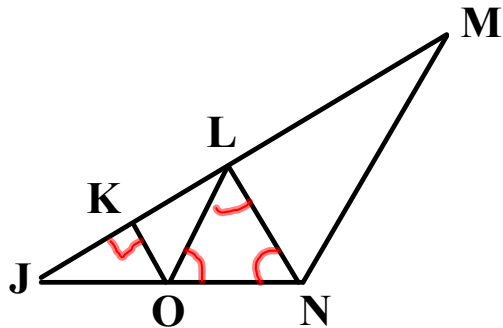
Scalene - no sides =

Classify triangle XYZ as acute, equiangular, obtuse, or right.



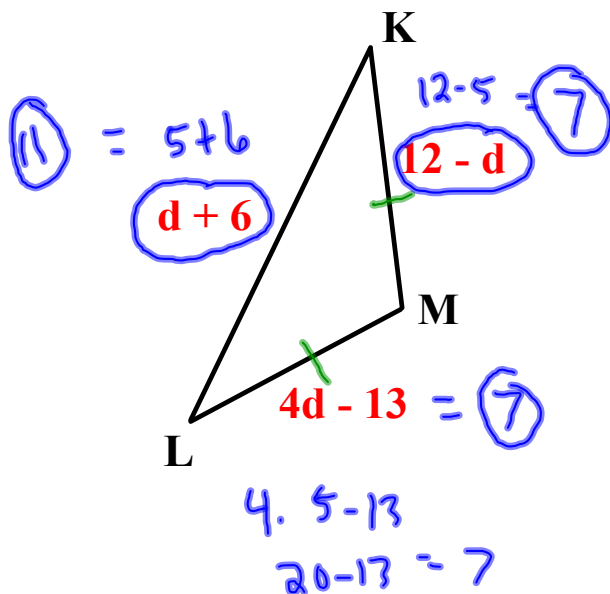
Right, $\angle XYZ = 90$

Architecture: The triangular truss below is modeled for steel construction. Classify triangle JMN, JKO, & OLN as acute, equiangular, obtuse, or right.



- $\triangle JMN = \text{obtuse}$
- $\triangle JKO = \text{right}$
- $\triangle OLN = \text{equiangular}$

Find the measures of all three sides of isosceles triangle KLM with base KL.



$$\begin{aligned}
 12 - d &= 4d - 13 \\
 +13 & \quad +13 \\
 12 &= 5d - 13 \\
 \frac{25}{5} &= \frac{5d}{5} \\
 5 &= d
 \end{aligned}$$

Homework:

**p.239, # 21-29 all, 32, 33,
35 - 37 all, 44, 57-59 all, 65,
66, 68**

**Honors: add 49-52 all, 60
skip 36, 37**