

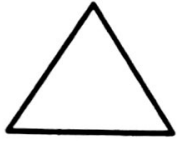
Notes 5-2
Triangles

Unit 7

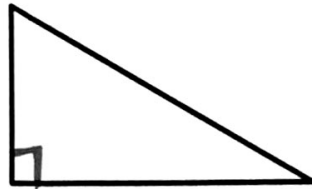
Int 1

Vocabulary:

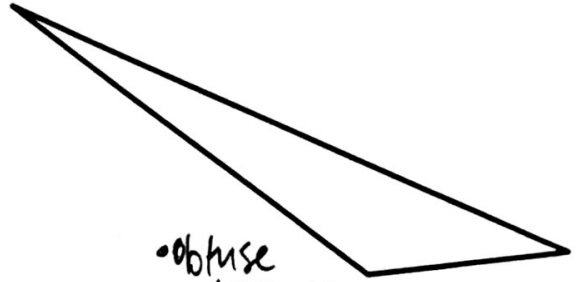
ANGLES



- Acute Triangle
- 3 acute \angle 's

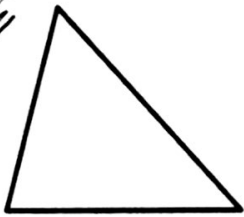


- Right Triangle
- 1 right angle

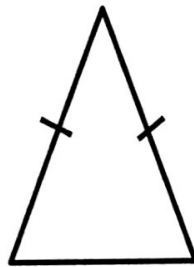


- obtuse triangle
- 1 obtuse \angle

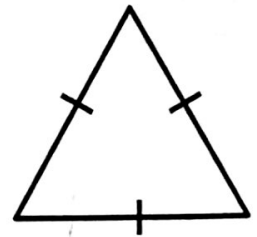
SIDES



- Scalene Δ
- No sides are the same length

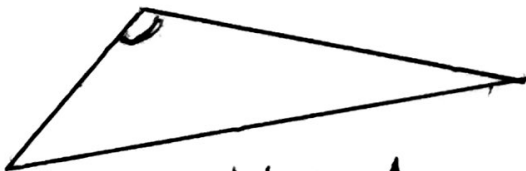


- Isosceles Δ
- 2 congruent sides



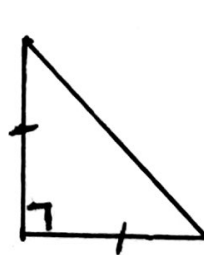
- Equilateral Δ
- all 3 sides are the same length

Ex. 1: Draw a triangle with one obtuse angle and no congruent sides. Classify the triangle.



- obtuse Δ
- Scalene Δ

Ex. 2: Draw a triangle with one right angle and two congruent sides. Classify the triangle.



- right isosceles

Classify the triangle show by its angles and by its sides.

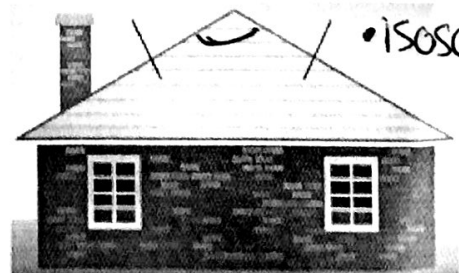
Ex. 3:

- Right
- scalene



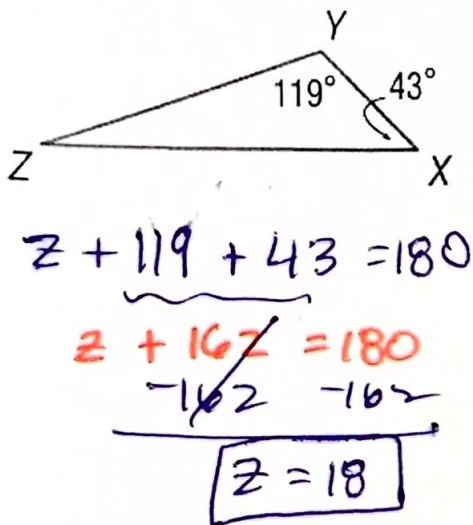
Ex. 4:

- obtuse
- isosceles

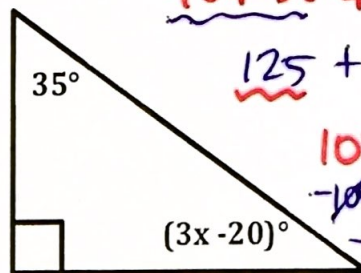


Angles of a Triangle: When you add up the \angle 's in a Δ , it always equals 180°

Ex. 5: Find $m\angle Z$.



Ex. 8:

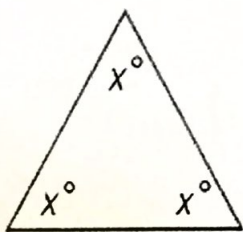


$$90 + 35 + 3x - 20 = 180$$

$$\underline{\underline{125 + 3x - 20 = 180}}$$

$$\begin{array}{r} 125 + 3x - 20 = 180 \\ -105 \quad -105 \\ \hline 3x = 75 \\ \underline{\underline{3}} \\ x = 25 \end{array}$$

Ex. 6:



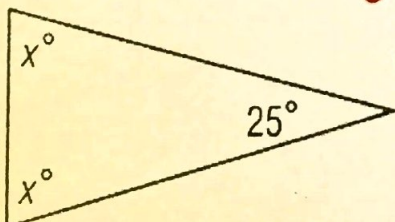
$$x + x + x = 180$$

$$\underline{\underline{3x = 180}}$$

$$\begin{array}{r} 3x = 180 \\ \underline{\underline{3}} \\ x = 60 \end{array}$$

Ex. 9: In ΔABC , if $m\angle A = 25^\circ$, and $m\angle B = 53^\circ$, what is $m\angle C$?

Ex. 7:



$$2x + 25 = 180$$

$$\underline{\underline{-25 \quad -25}}$$

$$\begin{array}{r} 2x = 155 \\ \underline{\underline{2}} \\ x = 77.5 \end{array}$$

