

5-10-18

Aim: SWBAT review triangles and quadrilaterals.

HW: Quiz Tomorrow (Triangles and Quadrilaterals)

Do Now: Correct hw

Pg. 418 #9-14, 17-18, 25

$$\begin{array}{r} \textcircled{9} \quad x + 110 + 70 + 71 = 360 \\ x + 251 = 360 \\ -251 \quad -251 \\ \hline x = 109 \end{array}$$

$$\begin{array}{r} \textcircled{10} \quad x + 95 + 60 + 100 = 360 \\ x + 255 = 360 \\ -255 \quad -255 \\ \hline x = 105 \end{array}$$

$$\begin{array}{r} \textcircled{11} \quad x + 140 + 70 + 85 = 360 \\ x + 295 = 360 \\ -295 \quad -295 \\ \hline x = 65 \end{array}$$

$$\begin{array}{r} \textcircled{12} \quad x + 80 + 100 + 40 = 360 \\ x + 220 = 360 \\ -220 \quad -220 \\ \hline x = 140 \end{array}$$

 $\angle x$ and $\angle y$ are supplementary

$$\begin{array}{r} \textcircled{13} \quad 115 + x = 180 \\ -115 \quad -115 \\ \hline x = 65 \end{array}$$

$$\begin{array}{r} y + 65 + 90 + 90 = 360 \\ y + 245 = 360 \\ -245 \quad -245 \\ \hline y = 115 \end{array}$$

$$\begin{array}{r} y + 140 = 180 \\ -140 \quad -140 \\ \hline y = 40 \end{array}$$

$$\begin{array}{r} \textcircled{14} \quad x + 54 + 54 = 180 \\ x + 108 = 180 \\ -108 \quad -108 \\ \hline x = 72 \end{array}$$

$$\begin{array}{r} y + 72 + 110 + 105 = 360 \\ y + 287 = 360 \\ -287 \quad -287 \\ \hline y = 73 \end{array}$$



$$(17) \quad 58 + 62 + (24x+1) + (25x-6) = 360$$

$$49x + 115 = 360$$

$$\begin{array}{r} -115 \\ -115 \end{array}$$

$$\frac{49x}{49} = \frac{245}{49}$$

$$x = 5$$

$$m\angle E = (24x+1)^\circ$$

$$m\angle H = (25x-6)$$

$$m\angle E = 24(5) + 1$$

$$m\angle H = (25(5) - 6)$$

$$\boxed{m\angle E = 121^\circ}$$

$$\boxed{m\angle H = 119^\circ}$$

$$(18) \quad x + (3x+13) + (x+1) + (4x-14) = 360$$

$$\frac{9x}{9} = \frac{360}{9}$$

$$x = 40$$

$$\boxed{m\angle J = x = 40^\circ}$$

$$m\angle L = (x+1)^\circ$$

$$m\angle M = (4x-14)^\circ$$

$$m\angle K = (3x+13)^\circ$$

$$m\angle L = (40+1)^\circ$$

$$m\angle M = (4 \cdot 40 - 14)$$

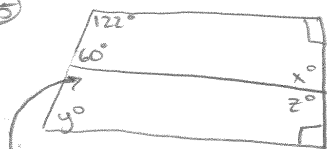
$$m\angle K = (3(40) + 13)$$

$$\boxed{m\angle L = 41^\circ}$$

$$\boxed{m\angle M = 146^\circ}$$

$$\boxed{m\angle K = 133^\circ}$$

(25)



$$x + 90 + 60 + 122 = 360$$

$$x + 272 = 360$$

$$\begin{array}{r} -272 \\ -272 \end{array}$$

$$\boxed{x = 88^\circ}$$

Supplementary

$$z + 88 = 180$$

$$\begin{array}{r} -88 \\ -88 \end{array}$$

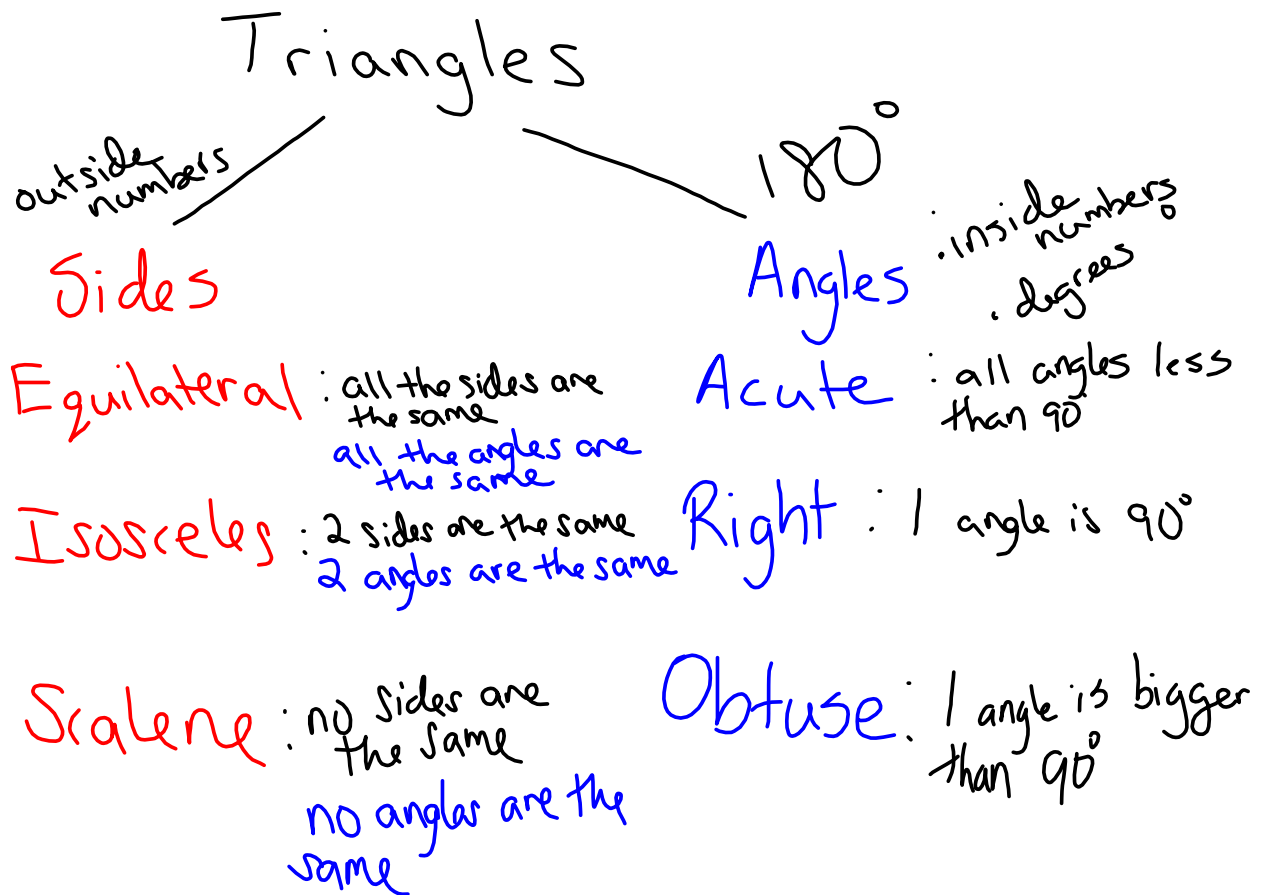
$$\boxed{z = 92^\circ}$$

$$y + 120 + 92 + 90 = 360$$

$$y + 302 = 360$$

$$\begin{array}{r} -302 \\ -302 \end{array}$$

$$\boxed{y = 58^\circ}$$



Equilateral Δ s are always acute.
 $180 \div 3 = 60^\circ$

Quadrilaterals : 360° total
4 angles and 4 sides

Trapezoid : 1 pair of parallel sides

Parallelogram : 2 pairs of parallel sides

Rhombus : 4 sides are the same

Rectangle : 4 right angles ; opp. sides
are the same

Square : all sides are the
same AND 4 right angles