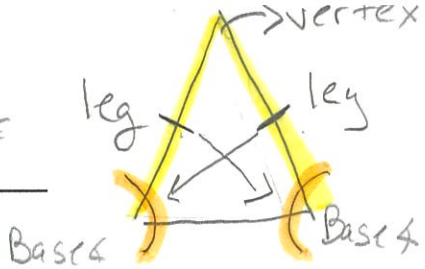
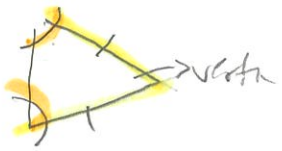
legs are ≅

Base ∠s are ≅

Name Key

Mrs. Roumbos





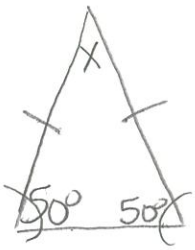
Date_____

8R Period_____

Triangle Word Problems
Do Now

I. Isosceles Triangle

1) If each base angle of an isosceles triangle measures 50°. Find the measure of the vertex angle of the triangle.



$50+50+x=180$

$100+x=180$

$-100 \quad -100$

$x=80$

the vertex ∠ is 80°

2) Find the measure of a base angle of an isosceles triangle if the measure of the vertex is 100°

$100+x+x=180$

$2x+100=180$

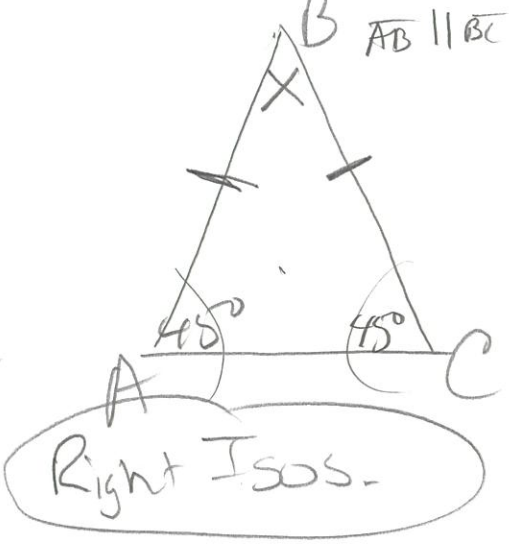
$-100 \quad -100$

$\frac{2x}{2}=\frac{80}{2}$

$x=40$

each base ∠ is 40°

3) In triangle ABC, $\overline{AB} \cong \overline{BC}$. If $m\angle A = 45°$, find $m\angle B$.



Right Isos.

$45+45+x=180$

$90+x=180$

$-90 \quad -90$

$x=90$

$m\angle B = 90°$