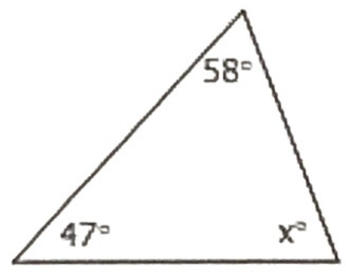
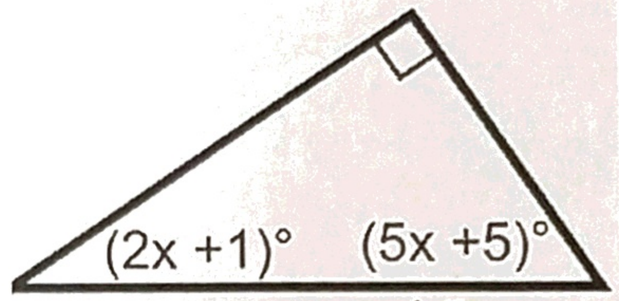
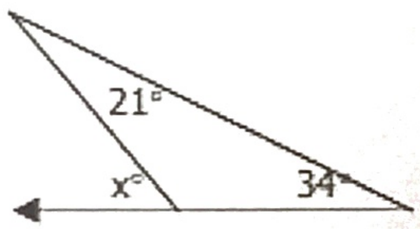
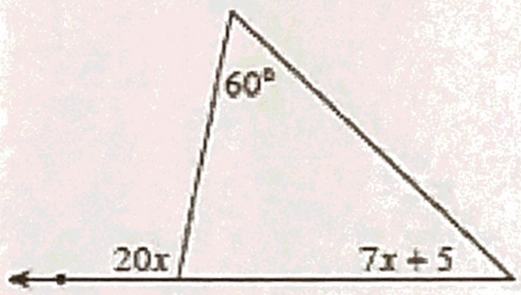
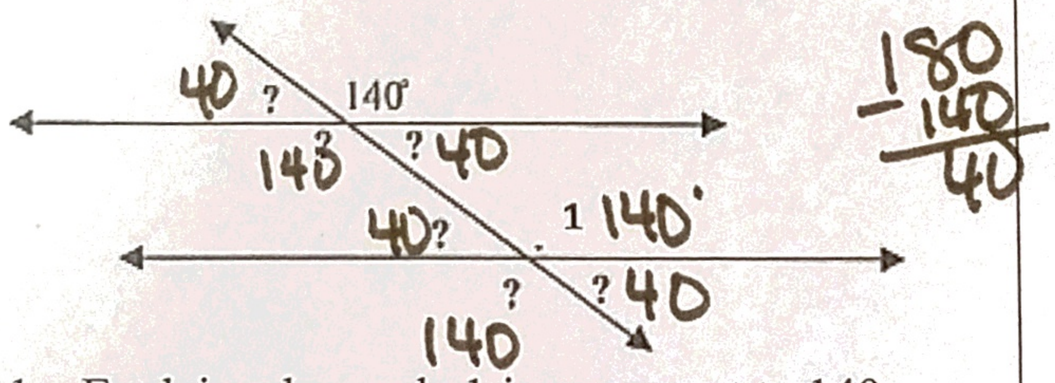
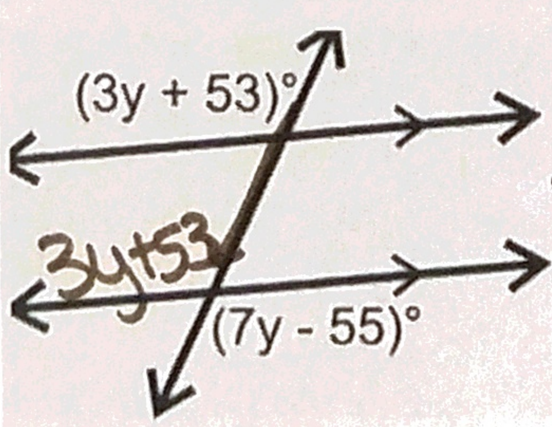
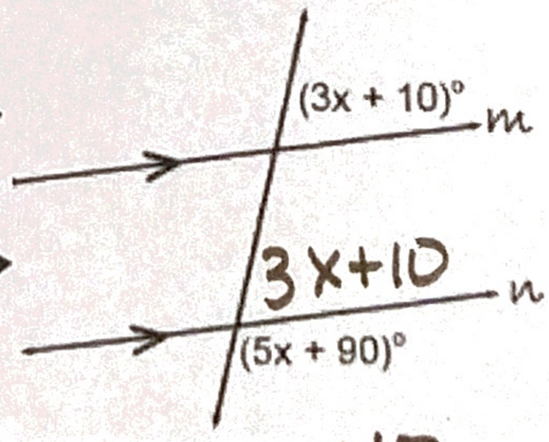
TRANSFORMATIONAL GEOMETRY PART 2
UNIT 6B TARGETS

for work, see next pg

SKILL	EXAMPLE	I THINK I WILL GET A...	ACTUAL TEST SCORE
**** I can explain and apply the triangle sum theorem.**	1. What do you know about the sum of angles in a triangle? 2. Find the value of x in each triangle below.  X=75  X=12		
I can explain and apply the relationship between a triangles exterior angles and interior angles.	1. What do you know about the exterior angle of a triangle? 2. Find the value of x in each picture below.  X=55  X=5		
**** I can explain and use angle relationships.**	 180 − 140 = 40 1. Explain why angle 1 is congruent to 140 degrees and find the other angle measures. 2. Make an equation to find the value of x or y in each picture below. Explain why your equation is correct.  y=27  x=10 3. Use your equation to find the value of x or y.		

① The angles in a △ add to 180° b/c they can be moved to make a straight angle.

② $47+58+x=180$

$105+x=180$

$-105 \quad -105$

$x=75$

$2x+1+5x+5+90=180$

$7x+96=180$

$-96 \quad -96$

$\frac{7x}{7} = \frac{84}{7}$

$x=12$

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① The exterior angle is = to the sum of 2 non-adjacent interior angles.

② out = in + in

$x = 21 + 34$

$x = 55$

out = in + in

$20x = 60 + 7x + 5$

$20x = 7x + 65$

$-7x \quad -7x$

$\frac{13x}{13} = \frac{65}{13}$

$x=5$

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① $4 \cong 140°$ b/c of a translation

② translate $3y+53$ down & they are vertical ($\cong$)

$3y+53=7y-55$

$-3y \quad -3y$

$53=4y-55$

$+55 \quad +55$

$\frac{108}{4} = \frac{4y}{4}$

$27=y$

translate $3x+10$ down & they are linear (suppl.)

$3x+10+5x+90=180$

$8x+100=180$

$-100 \quad -100$

$\frac{8x}{8} = \frac{80}{8}$

$x=10$