


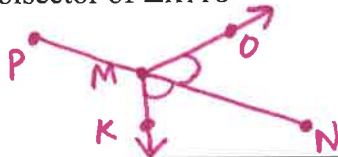
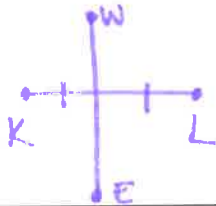
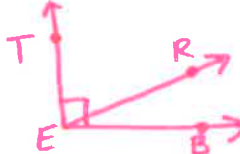
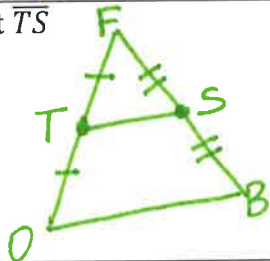
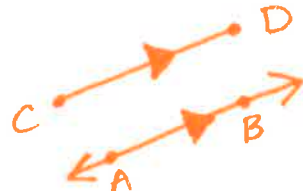
Name: _____

Key

Class: _____

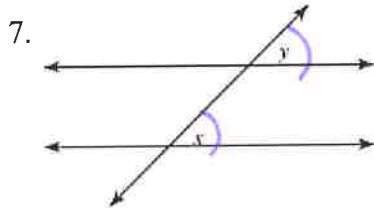
Math 2: Unit 7 Review Sheet

Part 1: Draw the following pictures. Make sure to label all points.

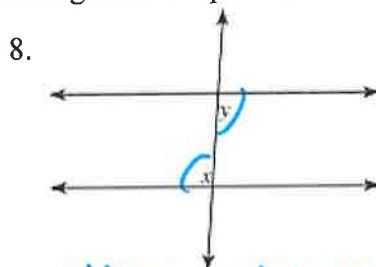
<p>1. H is the midpoint of \overline{JB}</p> 	<p>2. \overline{PN} is an angle bisector of $\angle KMO$</p> 
<p>3. \overline{WE} bisects \overline{KL}</p> 	<p>4. $\angle TER$ and $\angle BER$ are complementary</p> 
<p>5. $\triangle FOB$ has a midsegment \overline{TS}</p> 	<p>6. \overline{AB} and \overline{CD} are parallel.</p> 

Part 2: Angle pairs and their relationships

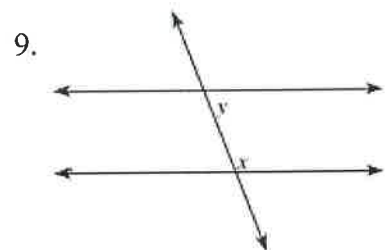
Determine the relationship between the angles in the picture



corresponding angles

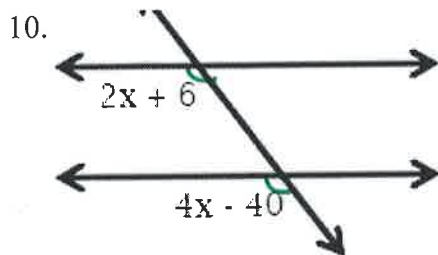


alternate interior angles



consecutive interior angles

Solve for X using the angle pair relationships

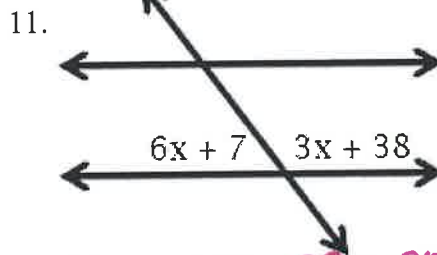


$$2x + 6 = 4x - 40$$

$$46 = 2x$$

$$23 = x$$

x = 23

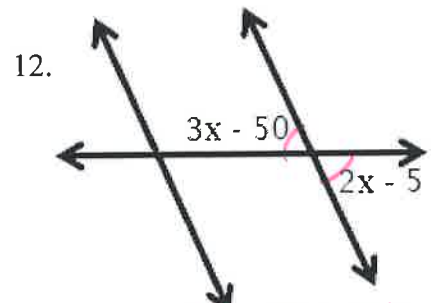


$$6x + 7 + 3x + 38 = 180$$

$$9x + 45 = 180$$

$$9x = 135$$

x = 15



$$3x - 50 = 2x - 5$$

$$x = 45$$

x = 45

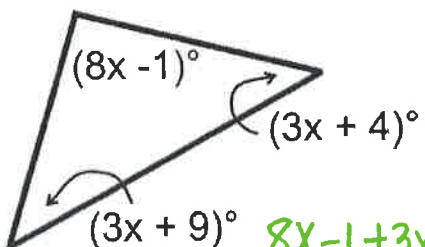
Part 3: Vocabulary

Know the following vocab words (including definition and picture)

- LINEAR PAIR
- CONGRUENT SEGMENTS
- RIGHT TRIANGLES
- VERTICAL ANGLES
- REFLEXIVE PROPERTY OF CONGRUENCE
- TRANSITIVE PROPERTY OF CONGRUENCE
- MIDSEGMENT
- PARALLEL
- COMPLEMENTARY ANGLES
- PERPENDICULAR BISECTOR
- CONGRUENT SEGMENTS
- MIDPOINT
- SUPPLEMENTARY ANGLES
- CONGRUENT ANGLES
- PERPENDICULAR
- SEGMENT BISECTOR

Part 5: Triangle Sum Theorem

Solve for x.

13. 

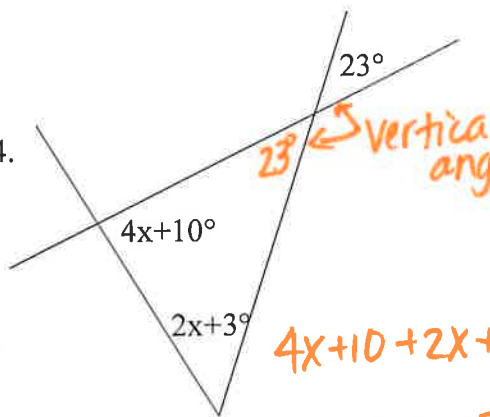
$$\underline{8x-1} + \underline{3x+9} + \underline{3x+4} = 180$$

$$14x + 12 = 180$$

$$14x = 168$$

$$x = 12$$

x = 12

14. 

$$4x + 10 + 2x + 3 + 23 = 180$$

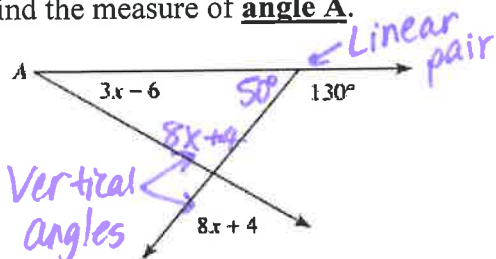
$$6x + 36 = 180$$

$$6x = 144$$

$$x = 24$$

x = 24

15. Find the measure of angle A.



$$\underline{3x-6} + 50 + \underline{8x+4} = 180$$

$$11x + 48 = 180$$

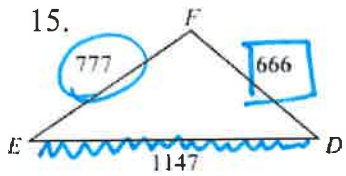
$$11x = 132$$

$$x = 12$$

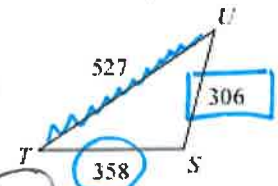
$$m\angle A = 3(12) - 6$$

$$m\angle A = \boxed{30^\circ}$$

Part 6: Similar Triangles



$\frac{1147}{527} = \frac{777}{358} = \frac{666}{306}$ Simplifies differently

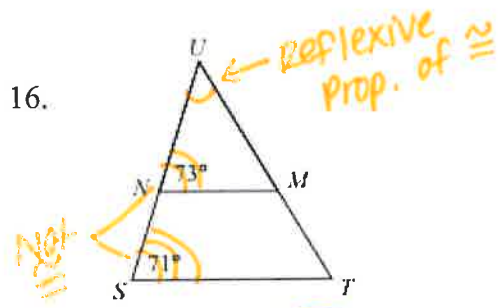


Similar? ~~Yes~~ or No

Reason: Close, but not similar!!

$\Delta FED \sim \Delta$ _____

16.

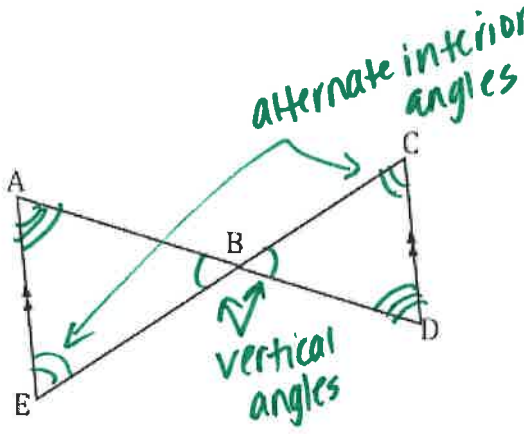


Similar? Yes or No

Reason: _____

$\Delta UNM \sim \Delta$ _____

17.

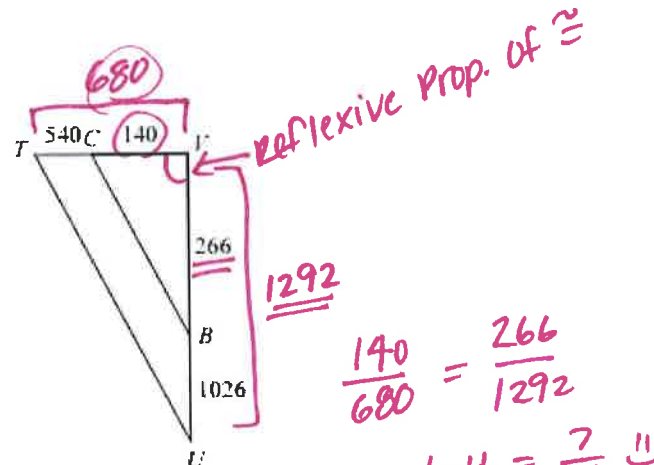


Similar? Yes or No

Reason: AA ~

$\Delta ABE \sim \Delta$ DBC

18.



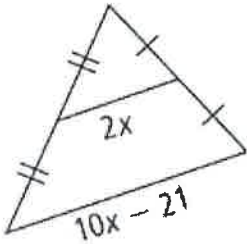
Similar? Yes or No

Reason: SAS ~

$\Delta VCB \sim \Delta$ VTU

Part 7: Midsegment of a Triangle. Find x in each of the following

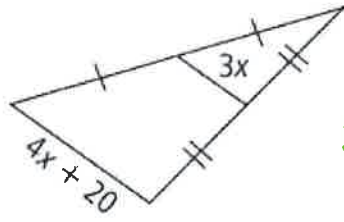
19.



$2(2x) = 10x - 21$
 $4x = 10x - 21$
 $-6x = -21$
 $x = 3.5$

x = 3.5 or $\frac{7}{2}$

20.



$2(3x) = 4x + 20$
 $6x = 4x + 20$
 $2x = 20$
 $x = 10$

x = 10