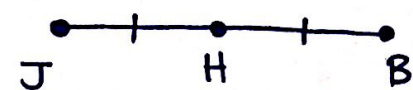
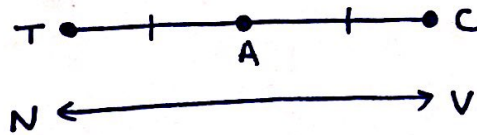
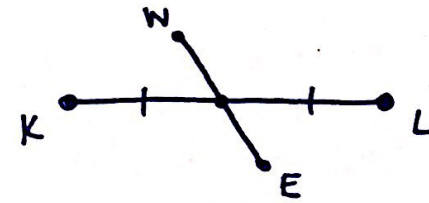
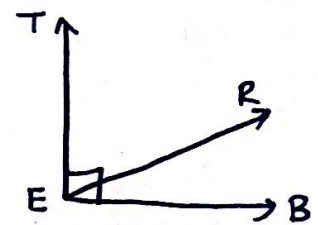


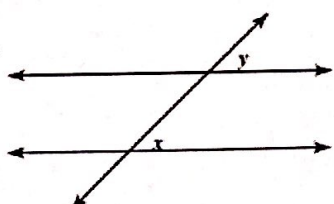
Math 2: Unit 7 Review Sheet

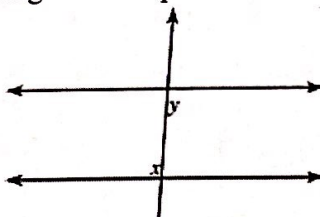
Part 1: Draw the following pictures. Make sure to label all points.

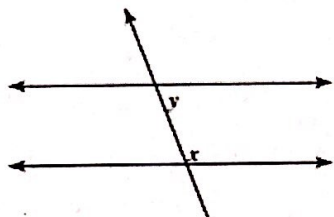
<p>1. H is the midpoint of \overline{JB}</p> 	<p>2. \overline{TC} and \overline{NV} are parallel. Point A is the midpoint of \overline{TC}.</p> 
<p>3. \overline{WE} bisects \overline{KL}</p> 	<p>4. $\angle TER$ and $\angle BER$ are complementary</p> 

Part 2: Angle pairs and their relationships

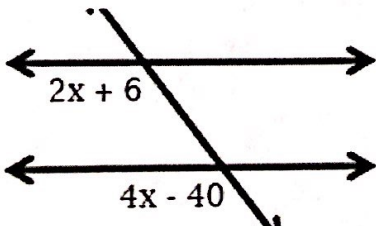
Determine the relationship between the angles in the picture

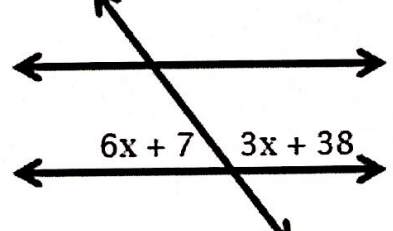
5. 
corresponding

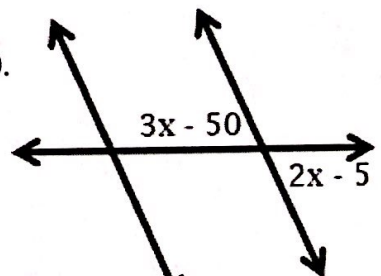
6. 
alt. interior

7. 
consecutive interior

Solve for X using the angle pair relationships

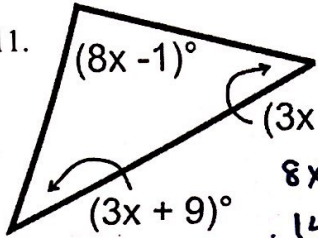
8. 
 $2x + 6 = 4x - 40$
 $46 = 2x$
 $x = \underline{23^\circ}$

9. 
 $6x + 7 + 3x + 38 = 180$
 $9x + 45 = 180$
 $9x = 135$
 $x = \underline{15^\circ}$

10. 
 $3x - 50 = 2x - 5$
 $x = \underline{45^\circ}$

Part 3: Triangle Sum Theorem

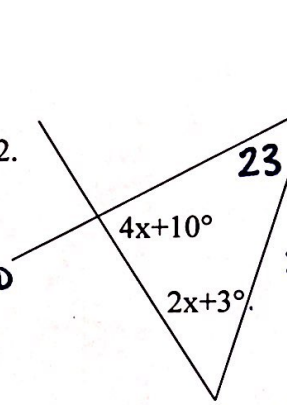
Solve for x

11. 
$$8x - 1 + 3x + 4 + 3x + 9 = 180$$

$$14x + 12 = 180$$

$$14x = 168$$

$$x = 12^\circ$$

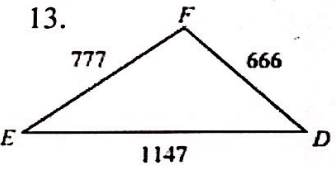
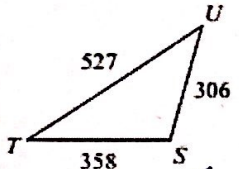
12. 
$$23 + 4x + 10 + 2x + 3 = 180$$

$$6x + 36 = 180$$

$$6x = 144$$

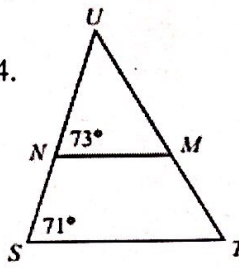
$$x = 24^\circ$$

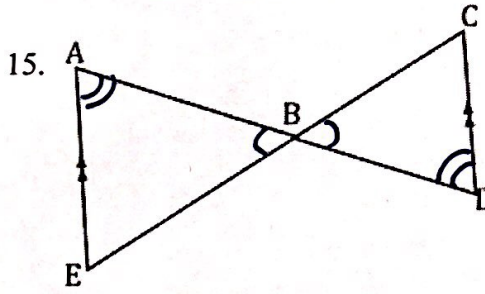
Part 4: Similar Triangles

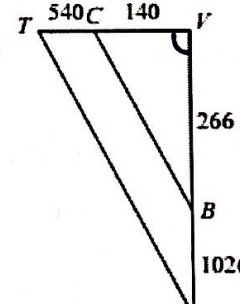
13.  
 Similar? Yes or No
 Reason: SSS

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

 $\triangle FED \sim \triangle STU$

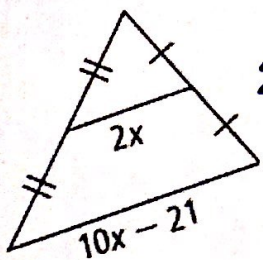
14. 
 Similar? Yes or No
 Reason: AA
 $\triangle UNM \sim \triangle \text{None}$

15. 
 Similar? Yes or No
 Reason: AA
 $\triangle ABE \sim \triangle CBD$

16. 
$$\frac{140}{266} = \frac{540}{1026}$$

 Similar? Yes or No
 Reason: SAS
 $\triangle VCB \sim \triangle VTU$

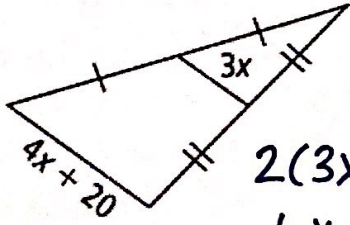
Part 5: Midsegment of a Triangle

17. 
$$2(2x) = 10x - 21$$

$$4x = 10x - 21$$

$$-6x = -21$$

$$x = 3.5$$

18. 
$$2(3x) = 4x + 20$$

$$6x = 4x + 20$$

$$2x = 20$$

$$x = 10$$