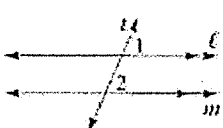
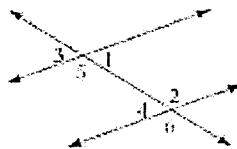
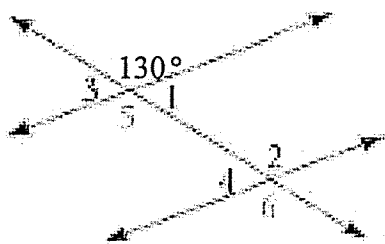
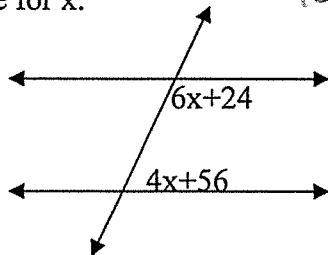
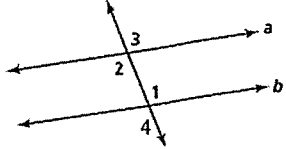
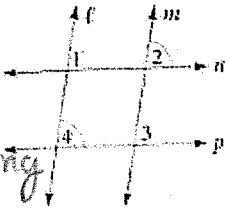
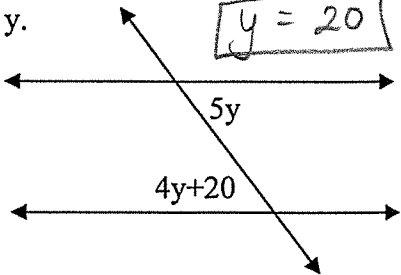


Geometry Unit #2

2.4 I can identify the Properties of Equality. Refer to your flip book, if necessary. G.CO.9 Proof of Understanding Reflexive $b = b$ Transitive If $b = c$ and $c = d$, then $b = d$ Symmetric If $b = c$, then $c = b$ Distributive Property If $x(w + z)$, then $xw + xz$	3.1 I can identify Parallel lines and a Transversal (G.CO.1 G.CO9) Proof of Understanding  Name the parallel lines <u>$l \parallel m$</u> Name the transversal <u>t</u>										
3.1 I can identify the special names of angle pairs. (G.CO.1 G.CO9) Proof of Understanding  Vertical Angles <u>$\angle 3$ and $\angle 1$</u> <u>$\angle 2$ and $\angle 6$</u> Corresponding <u>$\angle 3$ and $\angle 4$</u> <u>$\angle 5$ and $\angle 6$</u> Alternate Interior <u>$\angle 5$ and $\angle 2$</u> <u>$\angle 1$ and $\angle 4$</u> Same-Side Interior <u>$\angle 5$ and $\angle 4$</u> <u>$\angle 1$ and $\angle 2$</u>	3.1 I can find the measure of all special angles of parallel lines. (G.CO.1 G.CO9) Proof of Understanding $m\angle 1 = 50^\circ$ $m\angle 2 = 130^\circ$ $m\angle 3 = 50^\circ$ $m\angle 4 = 50^\circ$ $m\angle 5 = 130^\circ$ $m\angle 6 = 130^\circ$ 										
3.1 I can calculate the measure of all the special angles using algebra (G.CO.1 G.CO9) Proof of Understanding Solve for x.  $6x + 24 + 4x + 56 = 180$ $10x + 80 = 180$ $10x = 100$ $x = 10$	3.1 I can complete a 2-column proof of parallel lines (G.CO.1 G.CO9) Proof of Understanding Given: $a \parallel b$ Prove: $\angle 3 \cong \angle 4$  <table border="1"> <thead> <tr> <th>Statements</th> <th>Reasons</th> </tr> </thead> <tbody> <tr> <td>1. $a \parallel b$</td> <td>1. Given</td> </tr> <tr> <td>2. $\angle 1 \cong \angle 4$</td> <td>2. <u>Vertical</u></td> </tr> <tr> <td>3. $\angle 1 \cong \angle 3$</td> <td>3. <u>Corresponding</u></td> </tr> <tr> <td>4. $\angle 3 \cong \angle 4$</td> <td>4. <u>transitive</u></td> </tr> </tbody> </table>	Statements	Reasons	1. $a \parallel b$	1. Given	2. $\angle 1 \cong \angle 4$	2. <u>Vertical</u>	3. $\angle 1 \cong \angle 3$	3. <u>Corresponding</u>	4. $\angle 3 \cong \angle 4$	4. <u>transitive</u>
Statements	Reasons										
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3. $\angle 1 \cong \angle 3$	3. <u>Corresponding</u>										
4. $\angle 3 \cong \angle 4$	4. <u>transitive</u>										
3.2 I can prove 2 lines are parallel using a 2-column proof. (G.CO.1 G.CO9) Proof of Understanding Given: $l \parallel m$ and $\angle 4 \cong \angle 2$ Prove: $n \parallel p$  <table border="1"> <tbody> <tr> <td>1. $l \parallel m$</td> <td>a. <u>Given</u></td> </tr> <tr> <td>2. $\angle 1 \cong \angle 2$</td> <td>b. <u>Corresponding</u></td> </tr> <tr> <td>3. $\angle 4 \cong \angle 2$</td> <td>c. <u>Given</u></td> </tr> <tr> <td>4. $\angle 1 \cong \angle 4$</td> <td>d. <u>transitive</u></td> </tr> <tr> <td>5. $n \parallel p$</td> <td>e. <u>If corresponding angles are congruent then lines are parallel.</u></td> </tr> </tbody> </table>	1. $l \parallel m$	a. <u>Given</u>	2. $\angle 1 \cong \angle 2$	b. <u>Corresponding</u>	3. $\angle 4 \cong \angle 2$	c. <u>Given</u>	4. $\angle 1 \cong \angle 4$	d. <u>transitive</u>	5. $n \parallel p$	e. <u>If corresponding angles are congruent then lines are parallel.</u>	3.1 I can calculate the measure of all the special angles using algebra (G.CO.1 G.CO9) Proof of Understanding Solve for y.  $5y = 4y + 20$ $y = 20$
1. $l \parallel m$	a. <u>Given</u>										
2. $\angle 1 \cong \angle 2$	b. <u>Corresponding</u>										
3. $\angle 4 \cong \angle 2$	c. <u>Given</u>										
4. $\angle 1 \cong \angle 4$	d. <u>transitive</u>										
5. $n \parallel p$	e. <u>If corresponding angles are congruent then lines are parallel.</u>										

Angle Pairs

Supplementary

Sum = 180

Angle Names

(Examples from Figure)

① Same Side Exterior

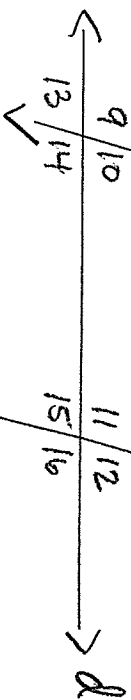
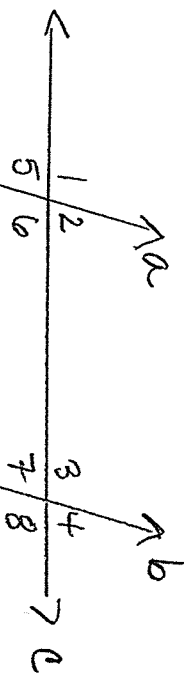
① $\angle 4$ and $\angle 16$ ② $\angle 5$ and $\angle 8$

② Same Side Interior

① $\angle 5$ and $\angle 9$ ② $\angle 2$ and $\angle 3$

③ Linear Pair

① $\angle 1$ and $\angle 5$ ② $\angle 12$ and $\angle 16$



Angle Names

(Examples from Figure)

① Alternate Interior

① $\angle 9$ and $\angle 6$

② $\angle 11$ and $\angle 14$

② Alternate Exterior

① $\angle 13$ and $\angle 12$

② $\angle 3$ and $\angle 16$

③ Corresponding

① $\angle 5$ and $\angle 7$

② $\angle 4$ and $\angle 12$

④ Vertical

① $\angle 9$ and $\angle 14$

② $\angle 4$ and $\angle 7$

Congruent

$\cong$