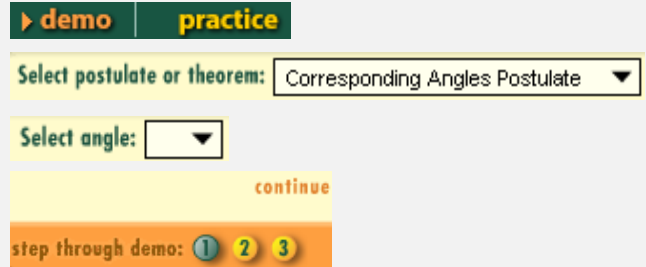


Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

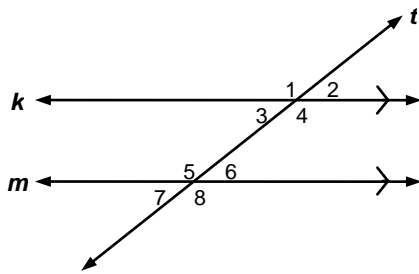
NAME: _____ CLASS: _____ DATE: _____

A. Directions for problems 1 – 4

- 1) Click **Demo**.
 - 2) Select **Corresponding Angles Postulate** from the drop-down menu.
 - 3) Select any one of the four angles.
 - 4) Step through the demo by clicking the navigation buttons at the bottom of the window.
- Note:* You may wish to view the demo again by selecting additional angles from the drop-down menu.
- 5) Complete problems 1 – 4 on this worksheet.

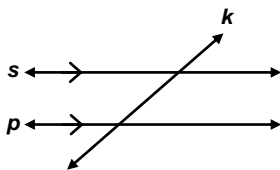


1. Given the following image and angles, identify the corresponding angles.

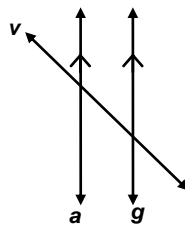


Given	Corresponding Angle
$\angle 1$	
$\angle 2$	
$\angle 3$	
$\angle 4$	

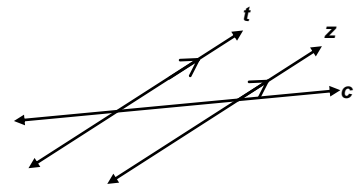
2. For each set of lines, identify which line is the transversal.



Transversal: _____



Transversal: _____



Transversal: _____

3. Congruent means _____

4. **Corresponding Angles Postulate:** If two parallel lines are cut by a transversal, then _____

Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

B. Directions for problems 5 – 6

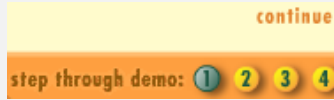
1) In **Demo**, select **Alternate Interior Angles Theorem** from the drop-down menu.

Select postulate or theorem: Alternate Interior Angles Theorem ▼

2) Select any one of the two angles.

Select angle: ▼

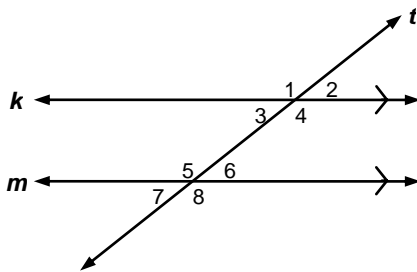
3) Step through the demo by clicking the navigation buttons at the bottom of the window.



Note: You may wish to view the demo again by selecting the other angle from the drop-down menu.

4) Complete problems 5 – 6 on this worksheet.

5. Given the following image, identify the alternate interior angle.



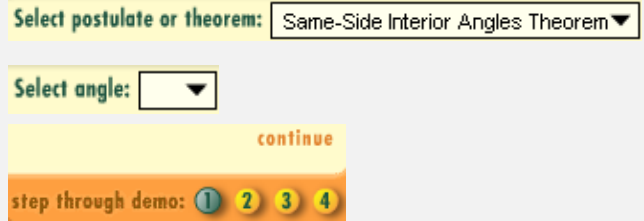
Given	Alternate Interior Angle
$\angle 3$	
$\angle 4$	

6. **Alternate Interior Angles Theorem:** If two parallel lines are cut by a transversal, then _____

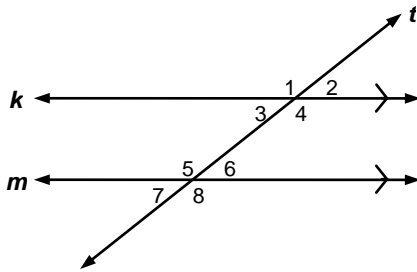
Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

C. Directions for problems 7 – 9

- 1) In **Demo**, select **Same-Side Interior Angles Theorem** from the drop-down menu.
 - 2) Select any one of the two angles.
 - 3) Step through the demo by clicking the navigation buttons at the bottom of the window.
- Note:* You may wish to view the demo again by selecting the other angle from the drop-down menu.
- 4) Complete problems 7 – 9 on this worksheet.



7. Given the following image, identify the same-side interior angle.




Given	Same-Side Interior Angle
$\angle 3$	
$\angle 4$	

8. Supplementary means _____

9. **Same-Side Interior Angles Theorem:** If two parallel lines are cut by a transversal, then _____

Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

D. Directions for problems 10 – 12

- 1) Click **Practice**.
- 2) Set up each problem *on the computer* to match the setup for each problem *on this worksheet*.
 - In the **Create Angles** panel, first select the *set of parallel lines*.
 - Then select one of the four angles and enter *its measure*.
- 3) In the **Measurements** panel *on the computer*, identify each special angle and its measure.
- 4) Click the **Check Answers** button  to check your work. Correct as necessary.
- 5) Complete problems 10 – 12 and record your answers on this worksheet.

10. **Setup:**  ; $m\angle 3 = 40^\circ$

Special Angles	Angle	Measure
corresponding angle	=	
alternate interior angle	=	
same-side interior angle	=	

11. **Setup:**  ; $m\angle 5 = 75^\circ$

Special Angles	Angle	Measure
corresponding angle	=	
alternate interior angle	=	
same-side interior angle	=	

12. **Setup:**  ; $m\angle 8 = 125^\circ$

Special Angles	Angle	Measure
corresponding angle	=	
alternate interior angle	=	
same-side interior angle	=	

Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

E. Directions for problems 13 – 16

- 1) In **Practice**, set up each problem *on the computer* to match the setup for each problem *on this worksheet*.
 - In the **Create Angles** panel, first select the *set of parallel lines*.
 - Then select the *angle* and enter *its measure*.
- 2) In the **Measurements** panel *on the computer*, identify the special angle and its measure.

Note: You do not have to complete *all* of the special angles in order to check an angle and its measure.
- 3) Click the **Check Answers** button to check your work. Correct as necessary.
- 4) Review the example, then complete problems 13 – 16. Record your answers on this worksheet.



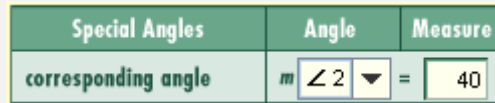
	Parallel Lines	Given Angle	Special Angle	Angle and Measure
Ex:		$m\angle 6 = 40$	Corresponding Angles	$m\angle 2 = 40$
13.		$m\angle 7 = 72$	Corresponding Angles	
14.		$m\angle 4 = 132$	Alternate Interior Angles	
15.		$m\angle 1 = 145$	Alternate Interior Angles	
16.		$m\angle 5 = 42$	Same-Side Interior Angles	

Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

F. Directions for problems 17 – 19

- 1) In **Practice**, set up each problem *on the computer* to match the setup for each problem *on this worksheet*.
 - In the **Create Angles** panel, first select the *set of parallel lines*.
 - Then select the *angle* and enter *its measure*.
- 2) In the **Measurements** panel *on the computer*, identify the special angle and its measure.
- 3) Then identify the special name for the pair of angles.


Note: You do not have to complete all of the special angles in the **Measurements** panel in order to check an angle and its measure.
- 4) Click the **Check Answers** button to check your work. Correct as necessary.
- 5) Review the example, then complete problems 17 – 19. Record your answers on this worksheet.

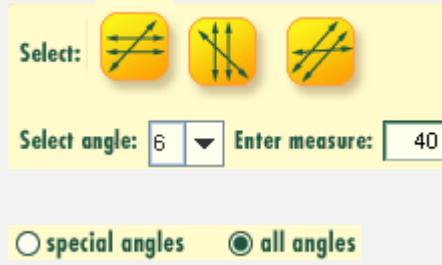


	Parallel Lines	Given Angle	Special Angle and Measure	Type of Special Angles
Ex.		$m\angle 4 = 118$	$m\angle 8 = \underline{118}$	Corresponding Angles
17.		$m\angle 5 = 77$	$m\angle 3 = \underline{\hspace{2cm}}$	
18.		$m\angle 7 = 95$	$m\angle 2 = \underline{\hspace{2cm}}$	
19.		$m\angle 8 = 128$	$m\angle 4 = \underline{\hspace{2cm}}$	

Parallel Lines: Special Angles: *In-class Worksheet (Middle School)*

G. Directions for problems 20 – 23

- 1) In **Practice**, set up each problem *on the computer* to match the setup for each problem *on this worksheet*.
 - In the **Create Angles** panel, select the appropriate set of parallel lines.
 - Then select the *angle* and enter *its measure*.
- 2) In the **Measurements** panel *on the computer*, select **All Angles**. Using the given angle, find the other angle measures.
- 3) Click the **Check Answers** button  to check your work. Correct as necessary.
- 4) Complete problems 20 – 23 and record your answers on this worksheet.



20. Setup: 

Angle Measures
$m\angle 1 =$
$m\angle 2 =$
$m\angle 3 =$
$m\angle 4 =$
$m\angle 5 =$
$m\angle 6 = 54$
$m\angle 7 =$
$m\angle 8 =$

21. Setup: 

Angle Measures
$m\angle 1 =$
$m\angle 2 = 150$
$m\angle 3 =$
$m\angle 4 =$
$m\angle 5 =$
$m\angle 6 =$
$m\angle 7 =$
$m\angle 8 =$

22. Setup: 

Angle Measures
$m\angle 1 = 116$
$m\angle 2 =$
$m\angle 3 =$
$m\angle 4 =$
$m\angle 5 =$
$m\angle 6 =$
$m\angle 7 =$
$m\angle 8 =$

23. Setup: 

Angle Measures
$m\angle 1 =$
$m\angle 2 =$
$m\angle 3 =$
$m\angle 4 =$
$m\angle 5 = 90$
$m\angle 6 =$
$m\angle 7 =$
$m\angle 8 =$