

## LINES & TRANSVERSALS

**I can define, identify and illustrate the following terms**

Transversal

Alternate exterior angles

Same side interior angles

Corresponding angles

Alternate interior angles

*Dates, assignments, and quizzes subject to change without advance notice*

Monday	Tuesday	Block Day	Friday
3 Angles formed by transversals <b>CITY PROJECT ASSIGNED</b>	4 Parallel Lines and transversals	5/6 Writing Equations of parallel and Perpendicular Lines	7 Practice QUIZ
10 <b>STUDENT HOLIDAY</b>	11 Proving lines Parallel	12/13 <b>Review</b>	14 <b>TEST 4</b>

### Monday, 10/3

Chapter 3 section 1: Lines and Angles	
1. I can apply the definitions of corresponding, alternate interior, alternate exterior, alternate interior, same side interior, and vertical angles and linear pairs.	
2. I can identify skew, parallel, and perpendicular lines.	
<b>ASSIGNMENT:</b> pg. 148 - 150 (#2-13, 18-25, 27-29, 35-40)	Completed:

### Tuesday, 10/4

Chapter 3 section 2: Angles formed by Parallel Lines and Transversals	
3. I can identify the angles formed when a transversal cuts two parallel lines.	
4. I can apply parallel line theorems and postulates to solve problems.	
<b>ASSIGNMENT:</b> pg. 158-161 (#6-11, 13-23, 30, 31)	Completed:

### Wednesday and Thursday, 10/5-6

Chapter 3 section 5 and 6: Slopes and Lines in the Coordinate Plane	
5. I can find the slope of a line (graph, points, equations)	
6. I can identify if 2 lines are parallel, perpendicular, coinciding, or have no special relationship.	
7. I can write the equation of a line parallel or perpendicular to another through a point.	
<b>ASSIGNMENT:</b> pg. 186 (11-21 odd) and pg. 194-197 (17-21, 33-35 odd, 37-40)	

### Friday, 10/7

Practice and QUIZ	
PRACTICE of all previously listed learning targets.	
<b>ASSIGNMENT:</b> Practice Worksheet <b>Quiz: Parallel Lines</b>	Grade:

**Tuesday, 10/11**

Chapter 3 section 3: Proving Lines Parallel	
2. I can identify the angles formed when a transversal cuts two parallel lines.	
3. I can apply parallel line theorems and postulates to solve problems.	
4. I can apply parallel line theorems and postulates to solve problems with algebra.	
<b>ASSIGNMENT:</b> pg. 166-169 (13-21 odd, 24-29, 44)	Grade:

**Wednesday and Thursday, 10/12-13**

Proving Lines Parallel/Review
City Project DUE
<b>ASSIGNMENT:</b> Review Worksheet

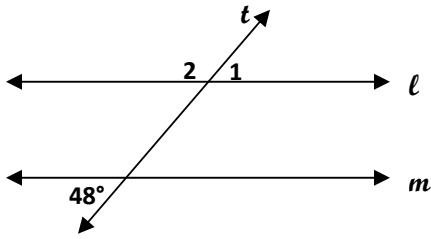
**Friday, 10/14**

<b>Test #5 – Lines &amp; Transversals</b>	<b>Test # 3</b>
I can demonstrate knowledge of ALL previously learned material.	
<b>ASSIGNMENT:</b> Test #5	Grade:

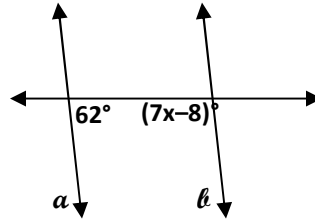
## Practice Worksheet

\*\* For this worksheet you can assume parallel lines \*\*

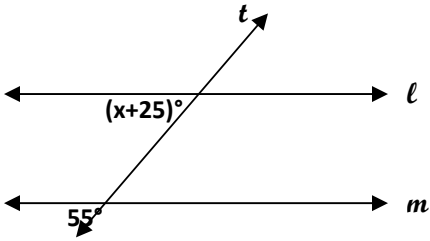
1.  $l \parallel m$ . Find  $m\angle 1$  and  $m\angle 2$



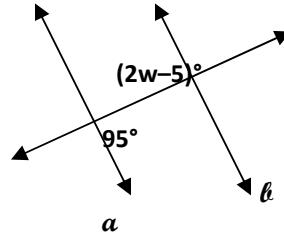
2.  $a \parallel b$ . Find  $y$



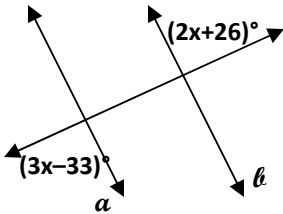
3.  $l \parallel m$ . Find  $x$ .



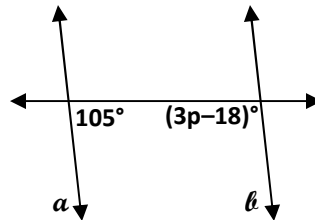
4.  $a \parallel b$ . Find  $w$ .



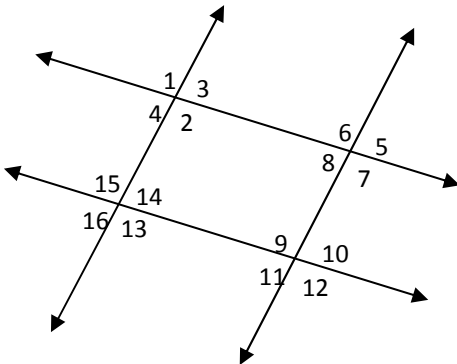
5.  $a \parallel b$ . Find  $x$ .



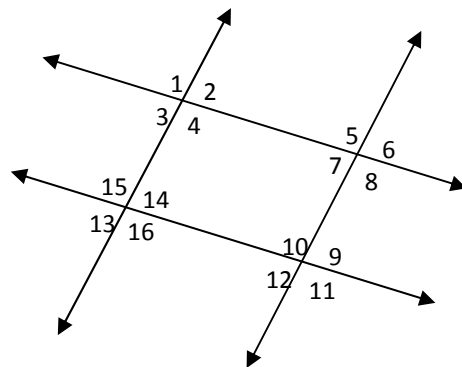
6.  $a \parallel b$ . Find  $p$ .



7. If  $m\angle 2 = 23^\circ$ , find  $m\angle 12$ .

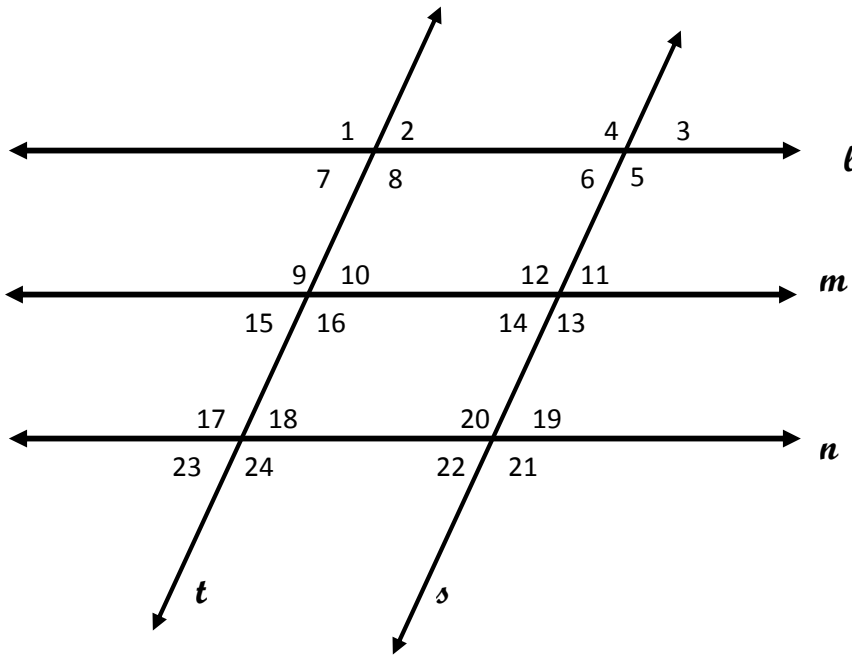


8. If  $m\angle 1 = 122^\circ$ , find  $m\angle 10$ .



9. Given  $\ell \parallel m \parallel n$  and  $s \parallel t$ , and  $m\angle 1 = 71^\circ$ , find:

- $m\angle 2 = \underline{\hspace{2cm}}$      $m\angle 3 = \underline{\hspace{2cm}}$      $m\angle 4 = \underline{\hspace{2cm}}$   
 $m\angle 5 = \underline{\hspace{2cm}}$      $m\angle 6 = \underline{\hspace{2cm}}$      $m\angle 7 = \underline{\hspace{2cm}}$   
 $m\angle 8 = \underline{\hspace{2cm}}$      $m\angle 9 = \underline{\hspace{2cm}}$      $m\angle 10 = \underline{\hspace{2cm}}$   
 $m\angle 11 = \underline{\hspace{2cm}}$      $m\angle 12 = \underline{\hspace{2cm}}$      $m\angle 13 = \underline{\hspace{2cm}}$   
 $m\angle 14 = \underline{\hspace{2cm}}$      $m\angle 15 = \underline{\hspace{2cm}}$      $m\angle 16 = \underline{\hspace{2cm}}$   
 $m\angle 17 = \underline{\hspace{2cm}}$      $m\angle 18 = \underline{\hspace{2cm}}$      $m\angle 19 = \underline{\hspace{2cm}}$   
 $m\angle 20 = \underline{\hspace{2cm}}$      $m\angle 21 = \underline{\hspace{2cm}}$      $m\angle 22 = \underline{\hspace{2cm}}$   
 $m\angle 23 = \underline{\hspace{2cm}}$      $m\angle 24 = \underline{\hspace{2cm}}$



Please fill the blank in with always, sometimes, or never.

10. Vertical angles are \_\_\_\_\_ congruent.

11. Corresponding angles are \_\_\_\_\_ congruent.

Indicate if the following pairs of lines are coinciding, parallel, perpendicular, or neither .

12.  $x - 5y = 0$                        $y + 1 = \frac{1}{5}(x + 5)$

13.  $y - 7x = 6$                        $y + 7x = 8$

14.  $6x - 4y = 24$                        $3y + 2x = 12$

Use the slopes to determine if the lines are parallel, perpendicular, or neither.

15.  $(1, 0)$   $(5, 3)$  and  $(6, -1)$   $(0, 2)$

16.  $(5, 1)$   $(-1, -1)$  and  $(2, 1)$   $(3, -2)$

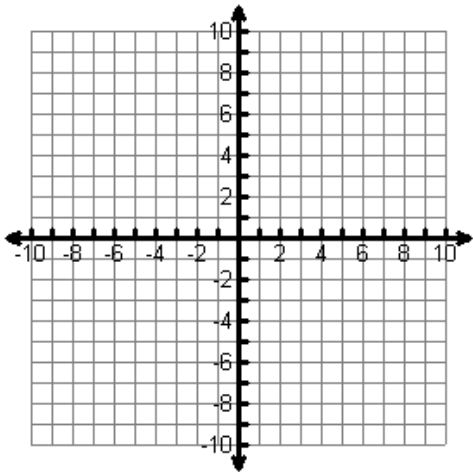
17. Write the equation of the line with slope  $\frac{1}{2}$  through the point  $(4, 6)$

18. Write the equation of the line through points  $(4, 2)$  and  $(8, 5)$

19. What is the slope of the line  $5y + 2x = 1$  ?

20. Use the slope formula to determine the slope of the line containing points  $A(0, 2)$  and  $B(2, 3)$ .

21. Graph the line  $y - 2 = \frac{1}{4}(x + 1)$



22. Write the equation of the line that is parallel to  $y = \frac{1}{2}x - 5$  and contains point  $(2, -1)$ .

23. Write the equation of the line that is perpendicular to  $y = \frac{1}{2}x - 5$  and contains point  $(2, -1)$ .