Name: ______ Per: _____

Unit 4 Study	Guide	with	Class	Examples
one i beau	aarae		01000	2

Problem	Class Example	Memorize
1. Determine the distance between points	Ex1. Determine the distance between points	
(-14, -6) & (8, 7).	(-19, 2) & (-5, -8).	
2. Henry draws line segment PQ with	Ex2. Henry draws line segment PQ with	
coordinates of $P(1, 4)$ and $Q(7, 3)$. He translates	coordinates of $P(3, 2)$ and $Q(-4, 6)$. He	
the line segment 6 units down. He names this	translates the line segment 4 units right. He	
line segment $P'Q'$.	names this line segment $P'Q'$.	
a. Identify the new coordinates of $P' \& Q'$.	a. Identify the new coordinates of $P' \otimes Q'$.	
b. Describe now a vertical translation	b. Describe now a vnorizontal translation	
endpoints	endnoints	
	enupoints.	
-10 9 8 7 6 5 4 3 2 1 1 1 2 3 4 5 6 7 8 9 10	← <u>0 9 8 7 6 5 4 3 2 1 1 1 2 3 4 5 6 7 8 9 1</u> 0	
2 Calculate the midneint of a line or must be in	Fue? Calculate the midneint of - line	
3. Calculate the initipoint of a line segment with the endpoints (17, 8) and (5, 26)	exo. Calculate the initipoint of a line segment with the endpoints (25, 23) and (7, 5)	

4. The measure of angle <i>M</i> is 53°.	Ex4. The measure of angle M is 31° .	
a. What is the measure of an angle that is	a. What is the measure of an angle that is	
b. What is the measure of an angle that is	b. What is the measure of an angle that is	
supplementary to $\angle M$?	supplementary to $\angle M$?	
5. Jared bisects angle <i>LMN</i> . He labels a point on	Ex5. Jared bisects angle <i>STV</i> . He labels a point	
the bisector as <i>P</i> . Angle <i>LMN</i> is 148°. What is the measure of angles <i>LMP</i> and <i>PMN</i> ?	on the bisector as <i>E</i> . Angle <i>STV</i> is 34°. What is the measure of angles <i>STE</i> and <i>ETV</i> ?	
the measure of angles how and point.	the measure of angles of L and LTV.	
6. Given the figure, $m \angle 4 = 51^\circ$, determine the $m \angle 8$ and provide the theorem or postulate you	Ex6. Given the figure, $m \angle 7 = 129^\circ$, determine the $m \angle 8$ and provide the theorem or postulate	
used.	you used.	
t ^c	, c	
1/2	1/2-7*"	
8/3	8/3	
7/4 0	7/4 70	
6/5	6/5	
<i>¥</i>	4	
7. Given the figure, $m \angle 8 = 37^\circ$, determine the	Ex7. Given the figure, $m \angle 2 = 40^\circ$, determine the	
$m \angle 6$ and provide the theorem or postulate you	$m \angle 6$ and provide the theorem or postulate you	
used.	used.	
$b^{c} - a$	$b^{c} \rightarrow a$	
0/3	0/3	
b	a the	
7/4	7/4	
- 6/ 5	- 6/ 5	

	Name:	Per:
8. Solve for <i>x</i> and find the measure of the exterior angle. $ \begin{array}{r} $	Name:	Per:
9. Find the value of x and the measurement of all of the angles. (5x - 18)° (7x - 7)°	Ex9. Find the value of x and the measurement of all of the angles. $(9x - 16)^{\circ}$ $(2x + 6)^{\circ}$ $(2x + 8)^{\circ}$	
10. Find the measurement of the missing leg length. 6 cm	Ex10. Find the measurement of the missing leg length. 15 in 5 in	

Name: _____ Per: _____

Unit 4 Study Guide with Class Examples

Answers

1. √ 653				
2a. $P'(1, -2)$ and Q	2′(7, -3)			
2b. This vertical tra	anslation subtracts 6	(because it's 6 DOWN) fi	rom the <i>y</i> -value.	
3. (11,17)				
4a. 37°				
4b. 127°				
5. 74°				
6. <i>m</i> ∠8 = 51°	Theorem or F	ostulate: Alternate Inte	erior Angles Theorem	
7. $m \angle 6 = 37^{\circ}$	Theorem or F	ostulate: Correspondin	g Angles Postulate	
8. <i>x</i> = 12	Exterior Angl	e: 84°		
9. <i>x</i> = 13	$m \angle 1 = 47^{\circ}$	$m \angle 2 = 49^{\circ}$	$m \angle 3 = 84^{\circ}$	
10. 3√3				