Name: _____ **per** _____

LINES TEST REVIEW SHEET

Define each of the following terms:

Slope Intercept Form:_____

Perpendicular Bisector:_____

Point Slope Form: _____

Slope: _____

Parallel slopes/lines: _____

Perpendicular slopes/lines: _____

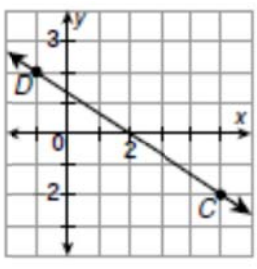
Transversal: _____

Skew Lines: _____

Draw an example of each of the following types of Angles:

Corresponding Angles:	Alternate Interior Angles:
Alternate Exterior Angles:	Same-Side Interior Angles:
Vertical Angles:	Linear Pair:

1. Write the equation of the line in the picture in POINT-SLOPE FORM.

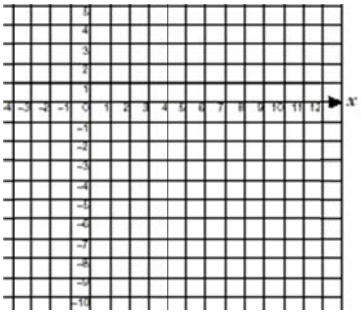


2. Write the equation of a line parallel to the original in SLOPE-INTERCEPT FORM..

3. Write the equation of a line perpendicular to the original that goes through the point (-1, 4) in POINT-SLOPE FORM. (using graph and #'s 1-2)

4. Determine the slope of the line containing points $A(5, -3)$ & $B(-2, 7)$.

Show work either on the graph or using slope formula!



4 (a). m = _____

4 (b). **Write the equation** of the above line in ***point-slope form*.**

4 (c). What is the slope of a line that is perpendicular to the one above?

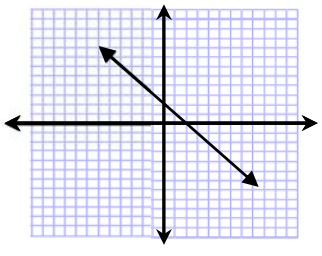
4 (d). What is the **equation of a line** perpendicular to the original line & passes through the point (2, -3)?

4 (e). What are the coordinates of the midpoint in between the original two points?

4 (f). What is the **equation of the perpendicular bisector** from the segment formed by the original two points?

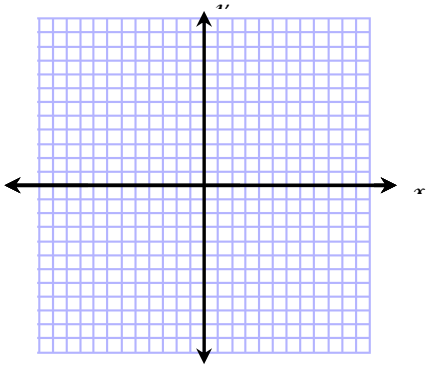
4 (g). What is the **equation of the line** that is parallel to the line y = 3x + 17?

5. The graph of a line is shown. If the y-**intercept is cut in half** and the **slope remains the same**, which equation represents the new line?



A. y = 2x – 6
B. y = - 2x – 3
C. y = - x + 2
D. y = x + 2

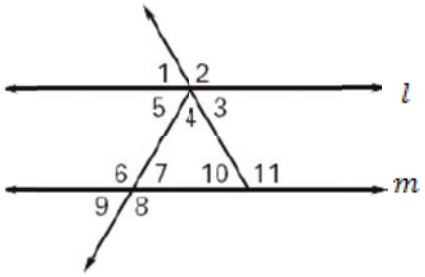
6. Graph the line $y - 3 = 4(x - 6)$.



7. Given A(3, 4), B(5, -2), C(-2, 4) and D(4, 6)…

Are lines AB and CD parallel, perpendicular, or neither?_____.

Using the figure below, Identify whether the pair of angles given are CONGRUENT, SUPPLEMENTARY, or NEITHER.



8.
9.
10.
11.
12.
13.
14.

For problems 15-22 find the measure of the angle given:

15.

16.

DEF

17.

$m\angle ABC$

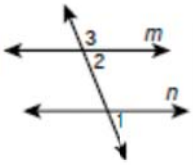
18.

19.

Given: $\angle 1$ and $\angle 3$ are supplementary.

Prove: $m \parallel n$

Proof:

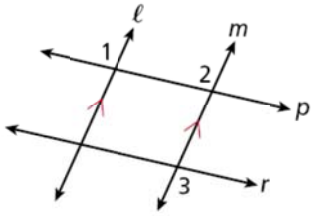


$m \parallel n$
$\angle 2$ and $\angle 3$ are supplementary.
Given
$\cong$ Supps. Thm.

Statements	Reasons
1. $\angle 1$ and $\angle 3$ are supplementary.	1. a. _____
2. b. _____	2. Linear Pair Thm.
3. $\angle 1 \cong \angle 2$	3. c. _____
4. d. _____	4. Conv. of Corr. $\measuredangle$s Post.

20.

Given: $p \parallel r$, $\angle 1 \cong \angle 3$
Prove: $\ell \parallel m$



Statements	Reasons
1. $p \parallel r$	**1.**
2.	**2.** Alt. Ext. $\angle$s Thm.
3.	**3.** Given
4. $\angle 1 \cong \angle 2$	**4.**
5. $\ell \parallel m$	**5.**

21.

Given: $r \parallel s$, $\angle 1 \cong \angle 2$

Prove: $r \perp t$