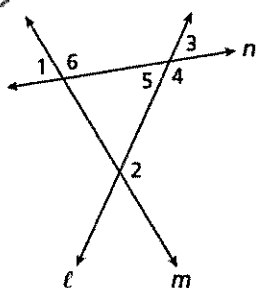


Group Review

0.1 1. Lines that do not intersect and are in different planes are _____.

0.2 2. Identify the transversal and classify each angle pair:

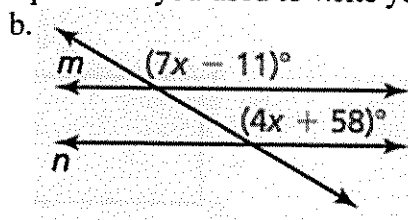
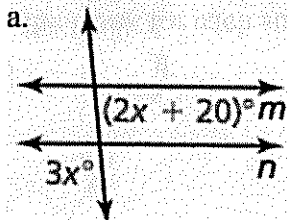


a. $\angle 5$ and $\angle 2$ are _____ angles
The transversal is: _____

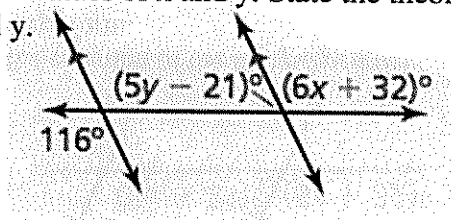
b. $\angle 2$ and $\angle 4$ are _____ angles
The transversal is: _____

c. $\angle 6$ and $\angle 3$ are _____ angles
The transversal is: _____

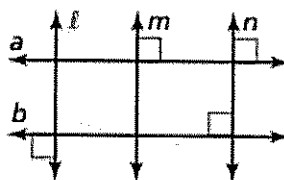
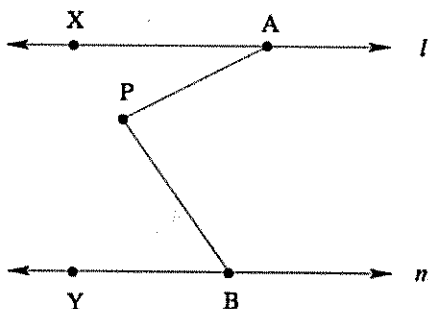
0.2 3. Find the value of x that makes $m \parallel n$. State the theorem or postulate you used to write your first equation.



0.1 4. Find the values of x and y . State the theorem or postulate you used to set up the two equations needed to solve for x and y .



0.1 5. Find $m\angle APB$ if $m\angle PAX = 31^\circ$, $m\angle PBY = 54^\circ$, and $l \parallel m$. (refer to your challenge problems for this one!!)



0.2 7. Fill in the blank for each statement

a. Horizontal lines have (choose one: zero / undefined) _____ slope.

b. Vertical lines have (choose one: zero / undefined) _____ slope.

c. Finish the first statements of each theorem:

Parallel Lines Theorem: In a coordinate plane, two distinct non-vertical lines are parallel if and only if they have the _____ slope.

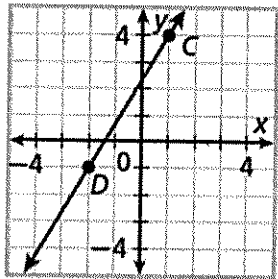
d. Finish the first statements of each theorem:

Perpendicular Lines Theorem: In a coordinate plane, two distinct non-vertical lines are perpendicular if and only if the _____ of their slopes is _____.

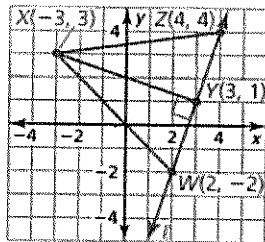
e. The slope-intercept form for the equation of a line is _____

f. The point-slope form for the equation a line is _____

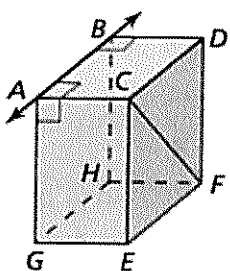
- 0.1 8. Use the slope formula to determine the slope of the given line.



- 0.1 9. Find the shortest distance from point X to $\overleftrightarrow{ZW}$.



- 0.1 10. Use the diagram below. Think of each segment as part of a line.



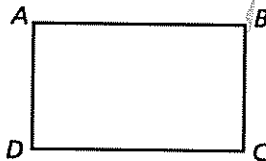
- Name a line that appears to be perpendicular to $\overleftrightarrow{AB}$: _____
- Name a line that appears to be parallel to $\overleftrightarrow{AB}$: _____
- Name a line that appears to be skew to $\overleftrightarrow{AB}$: _____
- Name a plane that appears to be parallel to plane ABC: _____

- 0.1 11. Use slopes to determine if the lines are parallel, perpendicular, or neither.
 $\overleftrightarrow{JK}$ and $\overleftrightarrow{LM}$ if J(4, 3), K(-4, -2), L(5, 6), and M(-3, 1)

- 0.2 12. Write the equation of the line *parallel* to $y = 4x - 3$ that goes through the point (3, 2). Write your answer in slope-intercept form.

- 0.2 13. Write the equation of the line *perpendicular* to $5x + 2y = 1$ that goes through the point (9, -1). Write your answer in slope-intercept form.

- 0.2 14. Fill in the flow chart proof. Given: $\overleftrightarrow{AD} \parallel \overleftrightarrow{BC}$, $\overleftrightarrow{AD} \perp \overleftrightarrow{AB}$, $\overleftrightarrow{DC} \perp \overleftrightarrow{BC}$
 Prove: $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$



$\overleftrightarrow{AD} \parallel \overleftrightarrow{BC}$

given

$\overleftrightarrow{AB} \perp \overleftrightarrow{BC}$

$\overleftrightarrow{AD} \perp \overleftrightarrow{AB}$

given

$\overleftrightarrow{DC} \perp \overleftrightarrow{BC}$

given

$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$