



Honors Geometry

Review – Section 1.1 – 1.5




1. V is in the interior of $\angle LOE$. $m\angle LOE = 21$, $m\angle LOV = -2x + 9$, $m\angle VOE = 2x^2 + 4x$. Find the measure of each angle.

2. Solve for x. $2|3x+1|+1=5$



3. $GH = 6$. The coordinate of G is $2x - 6$. The coordinate of H is $x - 5$. Find the coordinate of G.

4. The $m\angle ABC = 42$ and $m\angle ABD = 50$. Find the measure(s) of $\angle CBD$.



5. Draw: The intersection of plane X and Y is \overline{PQ}

6. A, B and C are collinear. B is between A and C. $AB = \frac{3}{4} BC$, $AC = 28$. Find AB.

7. $AB = 7$. The coordinate of A is -6. Find the coordinate(s) of B.

8. True or False? Explain your answer.

a. Any three points determine a unique plane.

b. Two planes intersect in a point.

c. If H is between R and Q then $RH = HQ$.

d. Any figure made up of two rays is an angle.

9. $\angle TRS$ is a straight angle. $\angle TRX$ is a right angle.

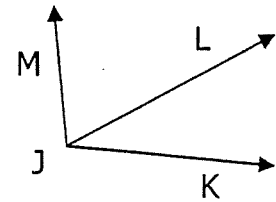
$$m\angle TRS = 2x + 5y$$

$$m\angle XRS = 3x + 3y$$

Solve for x and y.

10. K is between J and L. If $JK = 2x + 5$, $KL = 5x + 3$ and $JL = x^2$, find the measure of each segment. Is K the midpoint of JL?

11. If the ratio of $\angle KJL$ to $\angle LJM$ is 5:3 and $\angle KJM = 144^\circ$, find $\angle LJM$.



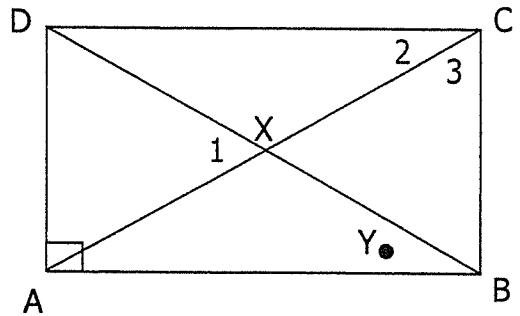
12. B is between A and C. $AB = 4x^2$, $BC = -11x$, $AC = 3$. Find AB and BC.

14. Sometimes, Always and Never. Explain.

- A segment can _____ have more than one midpoint.
- The bisector of an angle is _____ on the exterior of the angle.
- The bisector of an acute angle _____ forms two acute angles.
- Three points are _____ collinear.
- Three points are _____ coplanar.

15. Given the diagram, tell whether you can reach the conclusion shown.

- $\angle AXC$ is a straight angle.
- Point Y lies on the interior of $\angle 3$.
- $\angle ADC$ is a right angle.
- X is the midpoint of \overline{AC} .
- Point Y lies between points A and B.
- $\angle DXA$ and $\angle BXA$ are adjacent.



16. D is on the interior of $\angle ABC$. $m\angle ABC = 130$, $m\angle ABD = 3x + 4$, $m\angle CBD = 4x - 14$.
Is \overline{BD} the bisector of $\angle ABC$? Explain your answer.

17. Algebra Review!!!

- Find the distance between points, P and Q, if P (-2, -3) and Q (8, 10).
If necessary, round answer to the nearest tenths place.
- Find the midpoint between points P and Q in problem a.