

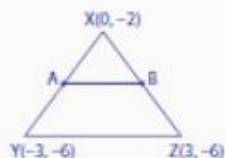
Name:

Date:

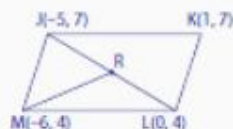
Hour:

Quiz 2 Review

1. A and B are the midpoints of XY and XZ. Find the length of AB.



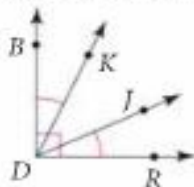
2. Find the length of MR if R is the midpoint of JL.



3. In the given figure, ray \overrightarrow{OB} bisects $\angle AOC$. The measure of $\angle AOC$ is $(7x + 2)^\circ$ and that of $\angle COB$ is $(5x - 8)^\circ$.

What is the measure of $\angle AOB$?

Exercises 4 and 5, find the value of each variable.



4. $m\angle BDK = 3x + 4$, $m\angle JDR = 5x - 10$
5. $m\angle BDJ = 7y + 2$, $m\angle JDR = 2y + 7$
6. \overrightarrow{DE} bisects \overline{AB} at C. If $AC = 8x - 3$ and $CB = 4x + 57$, find AC.

In Exercises 7 - 9, use the following information.

Q is in the interior of $\angle ROS$. S is in the interior of $\angle QOP$. P is in the interior of $\angle SOT$. $m\angle ROT = 127^\circ$, $m\angle SOT = 71^\circ$, and $m\angle ROQ = m\angle QOS = m\angle POT$. Make a sketch and answer the following.

7. Find $m\angle QOP$ 8. Find $m\angle QOT$ 9. Find $m\angle ROQ$

Let Q be in the interior of $\angle POR$. Use the Angle Addition Postulate to solve for x . Find the measure of each angle.

10. $m\angle POQ = (x + 4)^\circ$ 11. $m\angle POQ = (3x + 7)^\circ$ 16.
- $m\angle QOR = (2x - 2)^\circ$ $m\angle QOR = (5x - 2)^\circ$
- $m\angle POR = 26^\circ$ $m\angle POR = 61^\circ$

12. Algebra $JK = 48$. Find the value of x .



13. Algebra $M(x, y)$ is the midpoint of \overline{CD} with endpoints $C(5, 9)$ and $D(17, 29)$.
- a. Find the values of x and y .
- b. Show $MC = MD$.
14. To the nearest tenth, find the perimeter of $\triangle ABC$ with vertices $A(-2, -2)$, $B(0, 5)$, and $C(3, -1)$.

15.

Let Points A, B, C, D be collinear and arranged in that order.

Find x if $AC = 17$, $BD = 2x - 6$,
 $AD = x + 16$, and $BC = 6$.