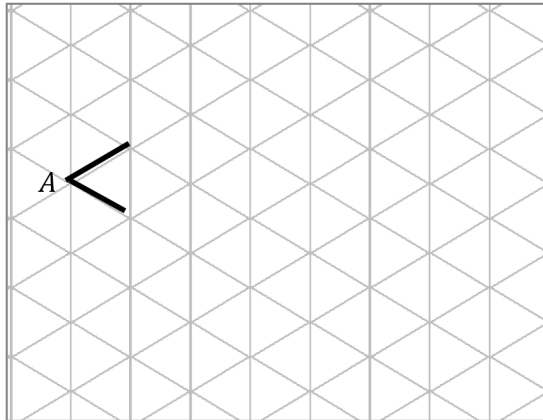


Name _____

Date _____

1. $\angle A$ measures 60° .

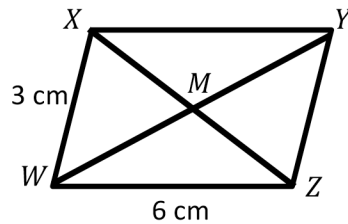
a. Extend the rays of $\angle A$, and draw parallelogram $ABCD$ on the grid paper.



b. What are the measures of $\angle B$, $\angle C$, and $\angle D$?

2. $WXYZ$ is a parallelogram not drawn to scale.

a. Using what you know about parallelograms, give the measure of sides XY and YZ .



b. $\angle WXY = 113^\circ$. Use what you know about angles in a parallelogram to find the measure of the other angles.

$\angle XYZ = \underline{\hspace{2cm}}^\circ$

$\angle YZW = \underline{\hspace{2cm}}^\circ$

$\angle ZWX = \underline{\hspace{2cm}}^\circ$

3. Jack measured some segments in Problem 2. He found that $\overline{WY} = 8\text{ cm}$ and $\overline{MZ} = 3\text{ cm}$.

Give the lengths of the following segments:

$WM = \underline{\hspace{2cm}}\text{ cm}$

$MY = \underline{\hspace{2cm}}\text{ cm}$

$XM = \underline{\hspace{2cm}}\text{ cm}$

$XZ = \underline{\hspace{2cm}}\text{ cm}$

4. Using the properties of shapes, explain why all parallelograms are trapezoids.
5. Teresa says that because the diagonals of a parallelogram bisect each other, if one diagonal is 4.2 cm, the other diagonal must be half that length. Use words and pictures to explain Teresa's error.

Answer Key

- Parallelograms will vary.
 - 120° ; 60° ; 120°
- 6 cm; 3 cm
 - 67° ; 113° ; 67°
- 4; 4; 3; 6
- Answers will vary.
- Answers will vary.