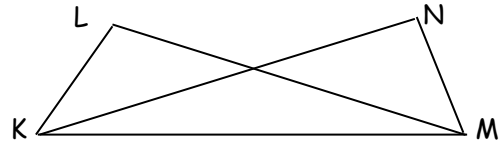


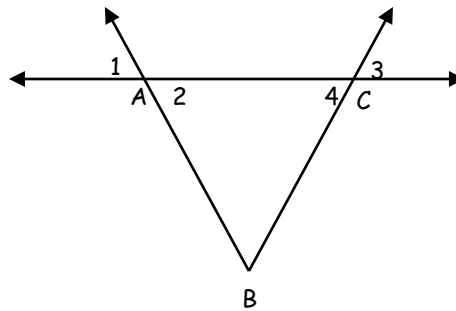
Pre-AP Geometry
Unit 7/8 Review

Name _____
 Pd. _____ Date _____

1. **GIVEN:** $\angle NKM \cong \angle LMK$; $\angle L \cong \angle N$
PROVE: $\triangle NMK \cong \triangle LKM$



2. **GIVEN:** $\angle 1 \cong \angle 3$
PROVE: $\overline{AB} \cong \overline{CB}$

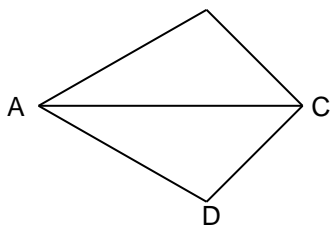


Write a congruency statement and give the postulate or theorem that applies.

3. $\triangle ABC \cong$ _____ by _____

$$\overline{BC} \cong \overline{DC}$$

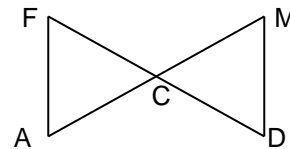
$$\overline{AB} \cong \overline{AD}$$



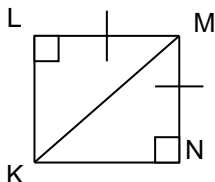
4. $\triangle AFC \cong$ _____ by _____

$$\overline{AF} \cong \overline{MD}$$

$$\overline{AF} \parallel \overline{MD}$$

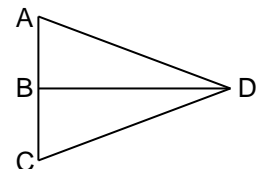


5. _____ \cong _____ by _____

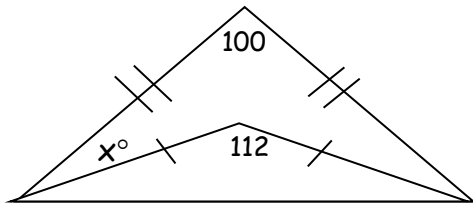


6. _____ \cong _____ by _____

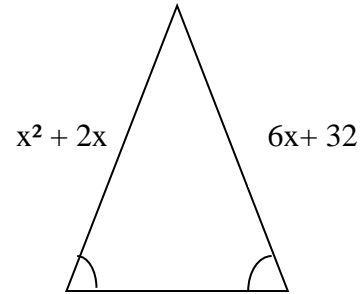
\overline{BD} is the \perp bisector
 of \overline{AC}



7. Find x .



8. Solve for x . $x =$ _____

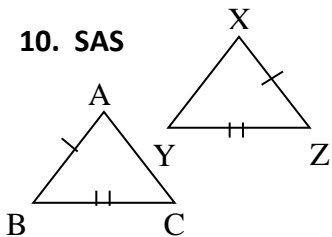


9. An isosceles triangle one leg is 2 more than 5 times the base. If the perimeter is 81, what is the length of one of the legs? (Hint: let the base = x)

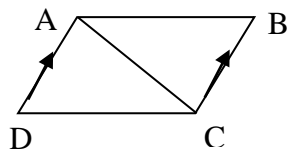
Length of one leg _____

Identify which missing piece of information is necessary to prove triangles are congruent with the indicated postulate.

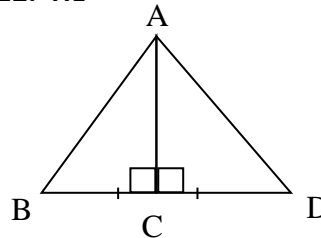
10. SAS



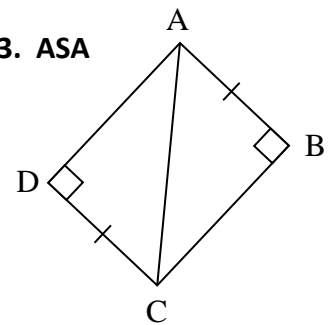
11. AAS



12. HL

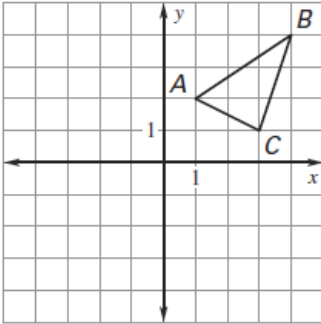


13. ASA

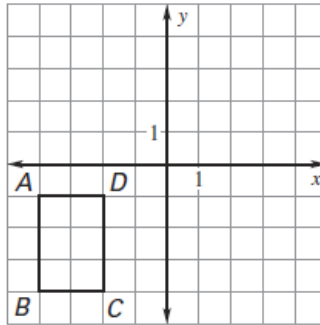


Graph the reflection of the polygon in the given line.

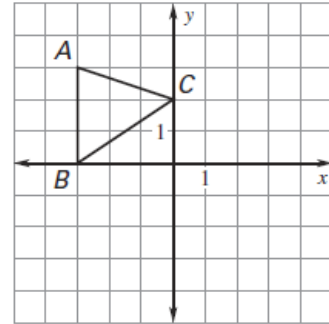
14. x-axis



15. y-axis

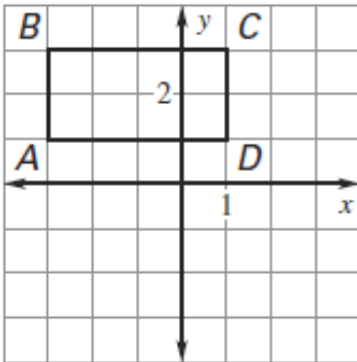


16. $x = -1$

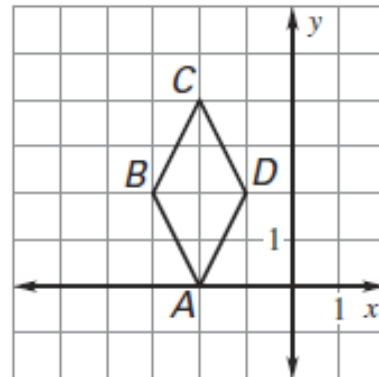


Rotate the figure the given number of degrees about the origin. List the coordinates of the vertices of the image.

17. 90°

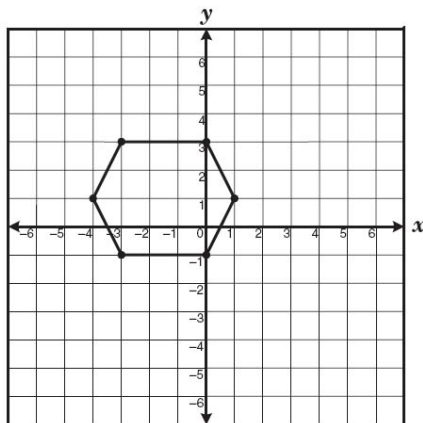


18. 180°



19. A hexagon is graphed on the coordinate grid. Which two coordinate points lie on the same line of symmetry on this hexagon?

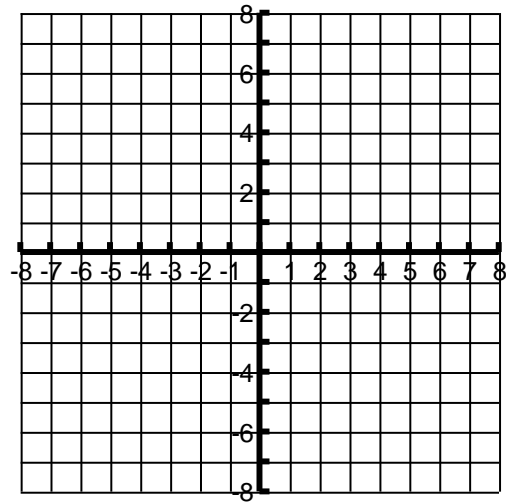
- A. $(-3, -1)$ and $(0, 3)$
- B. $(-1, 3)$ and $(-1, -1)$
- C. $(0, 3)$ and $(0, -1)$
- D. $(-4, 1)$ and $(1, 1)$



20. Graph triangle PQR with P(-6, -5), Q(-1, -2), R(-2, -6).
Reflect this triangle first over $x = 1$, then over $y = 1$.
List the coordinates.

P' _____ Q' _____ R' _____

P'' _____ Q'' _____ R'' _____



21. Draw a figure with reflectional and rotational symmetry:

22. Draw a figure with reflectional and NO rotational symmetry: