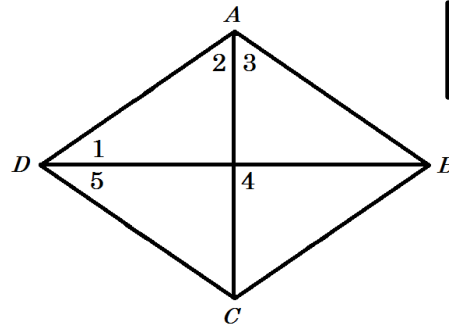


Name _____ Date _____ Period _____

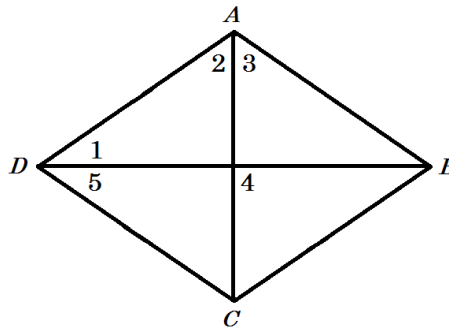
DIRECTIONS: For # 1-6, find the measure of each angle or the length of each segment in the following rhombus.



GIVEN: $m\angle 1 = 33^\circ$;
 $AB = 8$

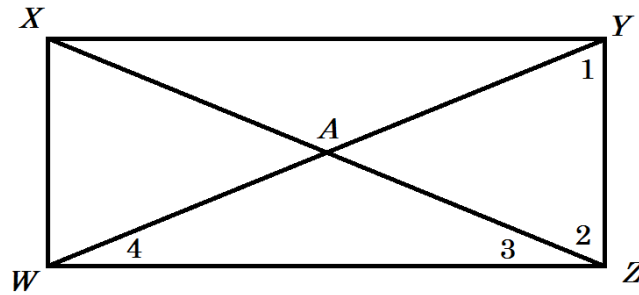
- | | | |
|------------------------|------------------------|------------------------|
| 1. $m\angle 2 =$ _____ | 2. $m\angle 3 =$ _____ | 3. $m\angle 4 =$ _____ |
| 4. $m\angle 5 =$ _____ | 5. $BC =$ _____ | 6. $DC =$ _____ |

DIRECTIONS: For #7-8, use the following diagram of a rhombus. Show work.



7. If $m\angle 2 = 4x + 2$ and $m\angle 3 = 6x - 22$, what is the value of x ? $x =$ _____
8. If $m\angle 1 = 3x + 5$ and $m\angle 2 = 6x + 4$, what is the value of x ? $x =$ _____

DIRECTIONS: For # 9-11, find the measure of each angle or the length of each segment in the following rectangle.



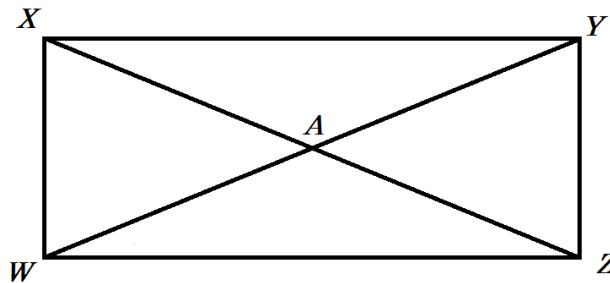
GIVEN: $m\angle 1 = 64^\circ$;

9. $m\angle 2 =$ _____

10. $m\angle 3 =$ _____

11. $m\angle 4 =$ _____

DIRECTIONS: For #12-13, use the following diagram of a rectangle. Show work for #13.



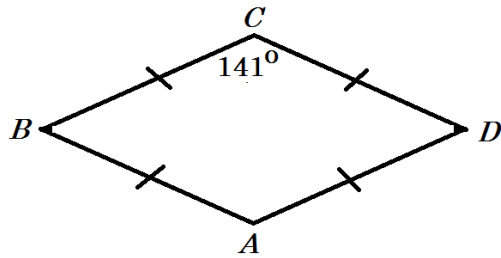
12. If $WY = 18$, what is XA ?

$XA =$ _____

13. If $YA = 5n + 11$ and $XZ = 82$, what is n ?

$n =$ _____

DIRECTIONS: For # 14-16, use the diagram of the rhombus to find the angle measures.

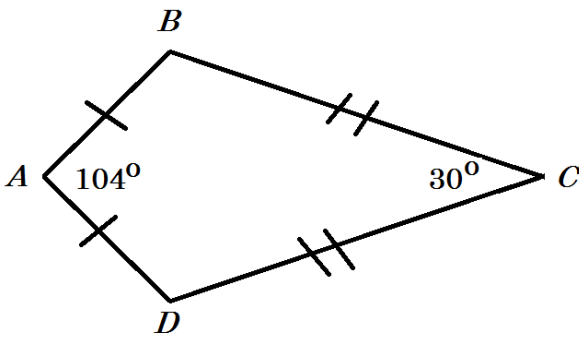


14. $m\angle B =$ _____

15. $m\angle A =$ _____

16. $m\angle D =$ _____

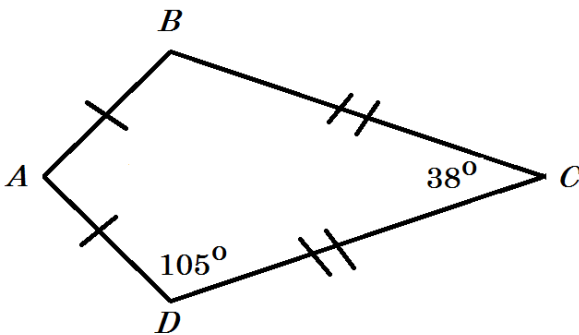
DIRECTIONS: For # 17-18, use the diagram of the kite to find the angle measures.



17. $m\angle B =$ _____

18. $m\angle D =$ _____

DIRECTIONS: For # 19-20, use the diagram of the kite to find the angle measures.



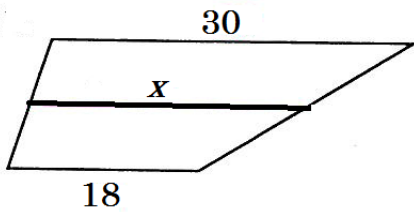
19. $m\angle A =$ _____

20. $m\angle B =$ _____

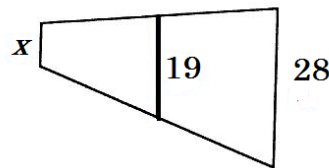
DIRECTIONS: For #21, find the measures of the angles.

- 21.** One angle of an isosceles trapezoid has a measure of 64° . What are the measures of the other three angles?

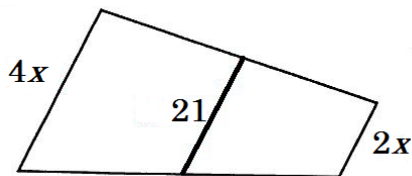
DIRECTIONS: For #22-25, each diagram shows a trapezoid and its midsegment. Solve for x .



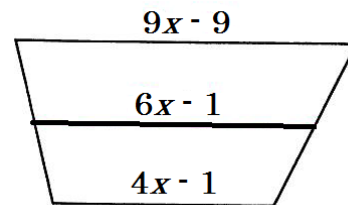
22. $x =$ _____



23. $x =$ _____



24. $x =$ _____

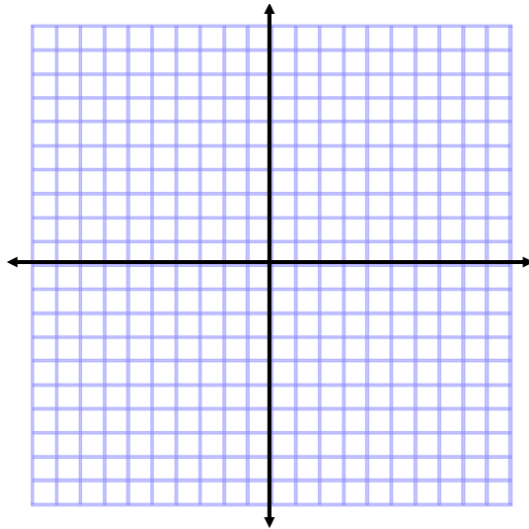


25. $x =$ _____

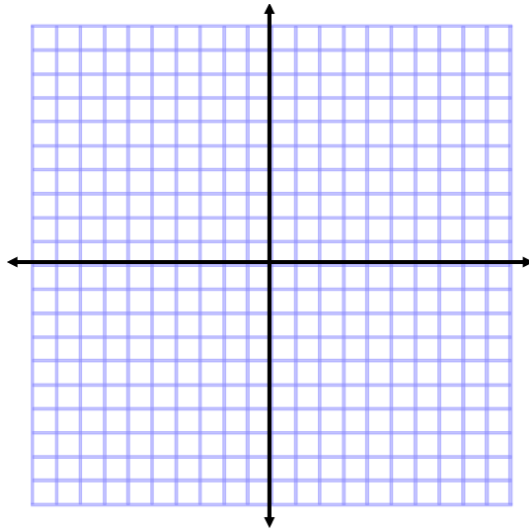
DIRECTIONS: For #26-32, fill in the blanks with the most accurate response – ALWAYS, SOMETIMES, or NEVER (write out the entire word).

- 26. The midsegment of a trapezoid is _____ parallel to both bases.
- 27. The diagonals of a trapezoid _____ bisect each other.
- 28. The diagonals of a rectangle are _____ congruent.
- 29. The diagonals of a trapezoid are _____ congruent.
- 30. A rectangle is _____ a square.
- 31. A square is _____ a rectangle.
- 32. A square is _____ a rhombus.

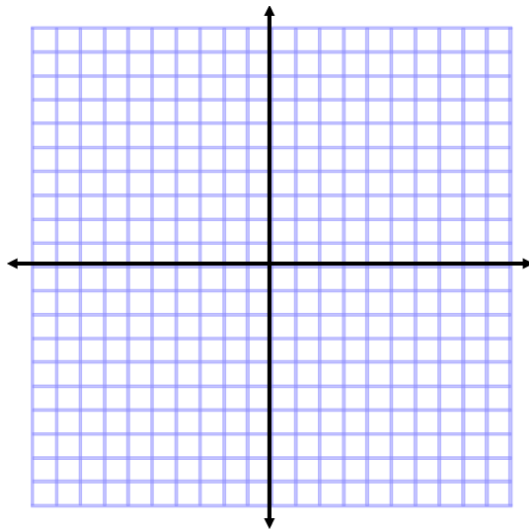
DIRECTIONS: For #33-38, find the fourth point to create the desired shapes. Use the graphs to help you find the answers. List the coordinates as an ordered pair.



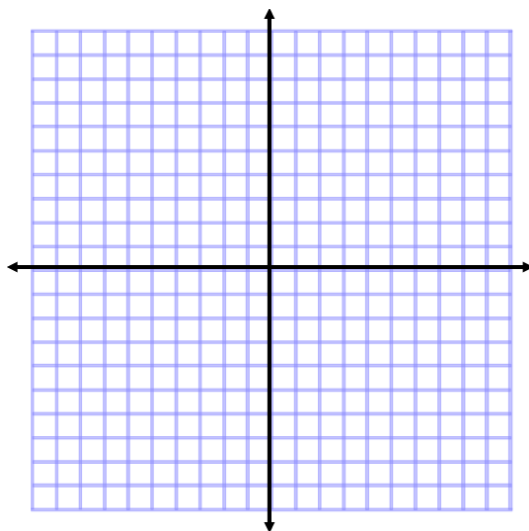
- 33. Three points of a **parallelogram** are $(4, 5)$, $(-1, 5)$, and $(1, 1)$. What is a possible fourth point?



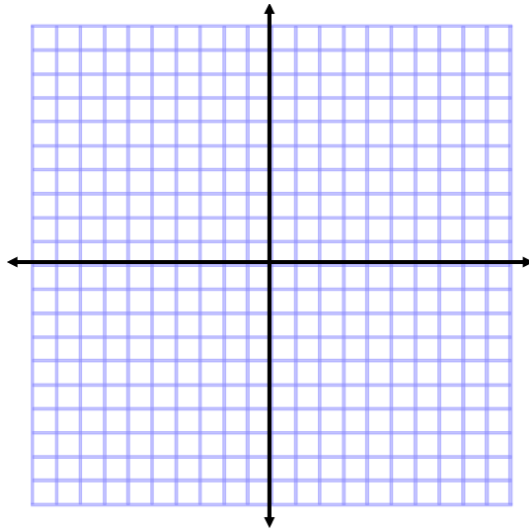
34. Three points of a **rectangle** are $(-5, 4)$, $(-5, -2)$, and $(3, 4)$. What is a possible fourth point?



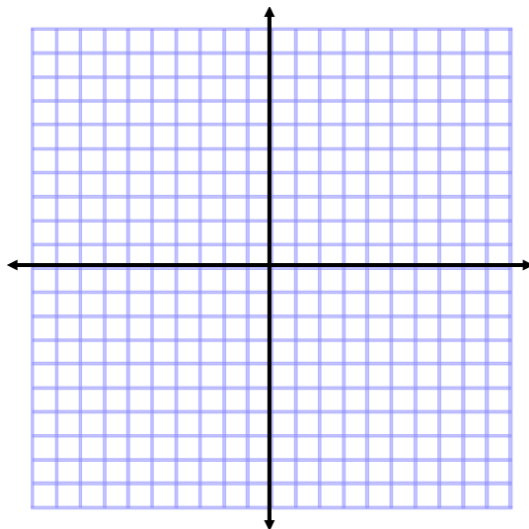
35. Three points of a **square** are $(-2, 3)$, $(-2, 6)$, and $(-5, 3)$. What is a possible fourth point?



36. Three points of a **rhombus** are $(-1, 0)$, $(4, 3)$, and $(9, 0)$. What is a possible fourth point?



37. Three points of an **isosceles trapezoid** are $(1, 8)$, $(5, 3)$, and $(5, 6)$. What is a possible fourth point?



38. Three points of a **kite** are $(4, 3)$, $(6, 1)$, and $(8, 3)$. What is a possible fourth point?
