

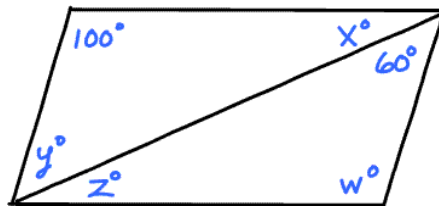


- \*20 questions
- \*Calculators allowed
- \*Show all work/steps- use separate paper
- \*Recommend time frame 30min -45min

*Provide complete explanations in your responses.*

### Parallelograms

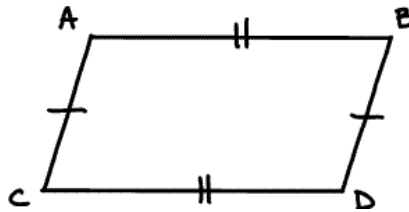
1. Define quadrilateral.
2. Define parallelogram.
3. Opposite sides of a parallelogram are \_\_\_\_\_.
4. Diagonals of a parallelogram \_\_\_\_\_ each other.
5. The figure is a parallelogram. Find the value of the variables.



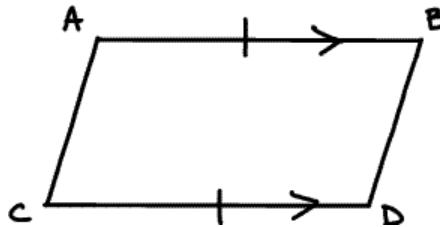
### Proving Quadrilaterals are Parallelograms

6. List all five justifications to show that a quadrilateral is a parallelogram.

7. Is the quadrilateral is a parallelogram? If so, state the theorem that supports your conclusion.

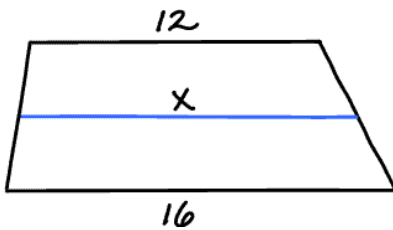


8. Is the quadrilateral is a parallelogram? If so, state the theorem that supports your conclusion.

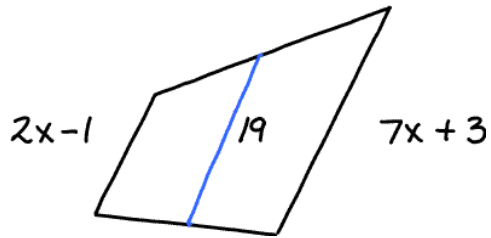


Trapezoids

- 9. True/False: The legs of a trapezoid are parallel?
- 10. The \_\_\_\_\_ of a trapezoid is the segment that joins the midpoints of the legs.
- 11. Base angles of an isosceles trapezoid are \_\_\_\_\_.
- 12. The figure shows a trapezoid and its median. Find the value of the variable.

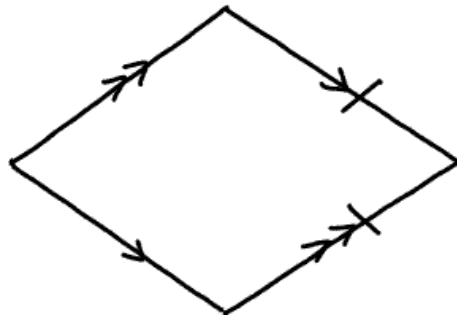


13. The figure shows a trapezoid and its median. Find the value of the variable.



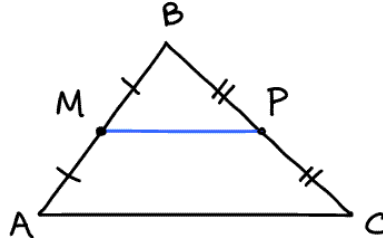
Special Quadrilaterals

- 14. Define rhombus.
- 15. The diagonals of a rectangle are \_\_\_\_\_.
- 16. The diagonals of a rhombus are \_\_\_\_\_.
- 17. Classify this quadrilateral.



Quadrilaterals, Triangles and Midpoints

18. Use the information in the figure to write an equation that shows the length of MP.



19. The line that contains the midpoint of one side of a triangle and is parallel to another side passes through the \_\_\_\_\_ of the third side.

20. Is there enough information in the diagram below to determine if  $DE \cong EF$ ? Explain.

