

Name: _____ Date: _____

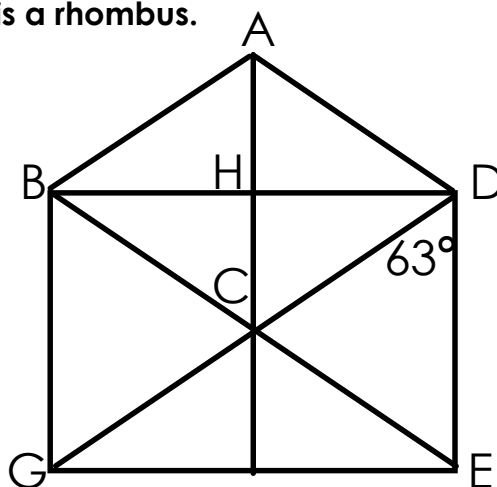
In the diagram shown, $BDEG$ is a rectangle and $ABCD$ is a rhombus.
Find the measure of the indicated angle.

1. $m\angle GDB =$ _____ 5. $m\angle GCE =$ _____

2. $m\angle ABC =$ _____ 6. $m\angle DEG =$ _____

3. $m\angle DAB =$ _____ 7. $m\angle AHB =$ _____

4. $m\angle BCG =$ _____ 8. $m\angle DGB =$ _____



Decide whether the statement is *true* or *false*.

9. If a quadrilateral is a rectangle, then it is a parallelogram. _____

10. If a quadrilateral is a parallelogram, then it is a rhombus. _____

11. If a quadrilateral is a square, then it is a rhombus. _____

12. If a quadrilateral is a rectangle, then it is a rhombus. _____

13. If a rhombus is a square, then it is a rectangle. _____

Find the length or angle measure.

14. $WXYZ$ is a square.

$WX = 1 - 10x$

$YZ = 14 + 3x$

$XY =$ _____

15. $WXYZ$ is a rhombus.

$m\angle X = 24(10 - x)^\circ$

$m\angle Z = 6(x + 15)^\circ$

$m\angle Y =$ _____

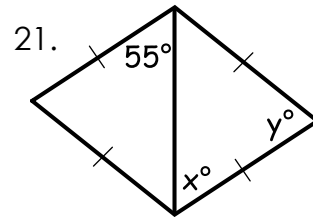
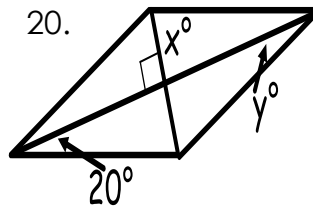
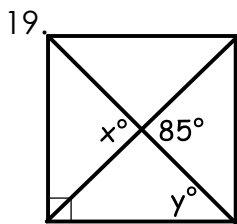
Quadrilateral ABCD is a rhombus.

16. If $m\angle BEC = (3x - 15)^\circ$,
then, $x =$ _____

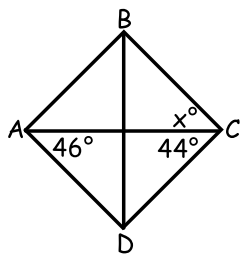
17. & $m\angle ADE = (5x - 8)^\circ$
& $m\angle CBE = (3x + 24)^\circ$,
then $x =$ _____

18. & $m\angle BAD = (4x + 14)^\circ$
& $m\angle ABC = (2x + 10)^\circ$,
then $x =$ _____

For each parallelogram (a) choose the best name and then (b) find the value of the variable(s).



22. $m\angle ABC = y$



23. $AC = 16, BD = 16$

