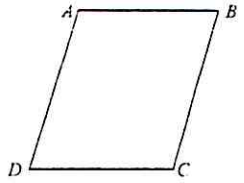
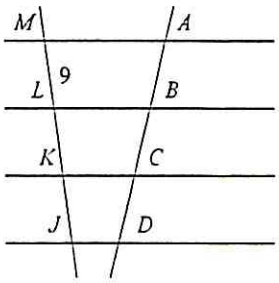
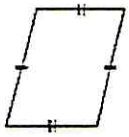
11. $ABCD$ is a parallelogram. If $m\angle CDA = 84$, then $m\angle DAB =$ ___?___. The diagram is not to scale.



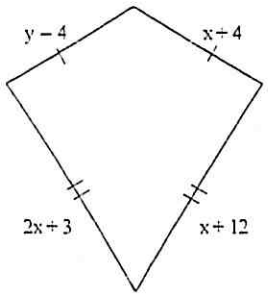
12. In the figure, the horizontal lines are parallel and $AB = BC = CD$. Find JM. The diagram is not to scale.



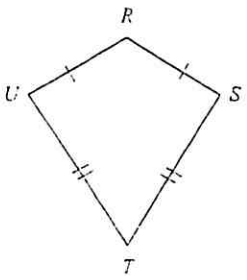
13. Based on the information in the diagram, can you prove that the figure is a parallelogram? Explain.



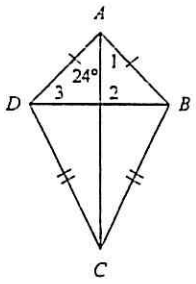
14. Find the values of the variables and the lengths of the sides of this kite.



15. $m\angle R = 150$ and $m\angle S = 100$. Find $m\angle T$. The diagram is not to scale.



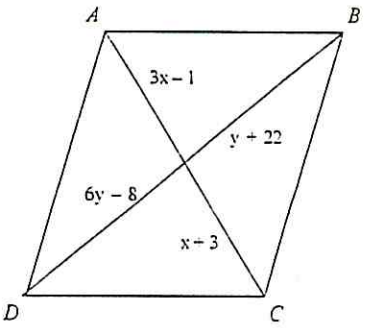
16. Find $m\angle 1$ and $m\angle 3$ in the kite. The diagram is not to scale.



17. $\angle J$ and $\angle M$ are base angles of isosceles trapezoid $JKLM$. If $m\angle J = 20x + 5$, and $m\angle M = 14x + 11$, find $m\angle K$.

18. $DEFG$ is a rectangle. $DF = 2x - 3$ and $EG = x + -1$. Find the value of x and the length of each diagonal.

19. Find values of x and y for which $ABCD$ must be a parallelogram. The diagram is not to scale.



20. In the rhombus, $m\angle 1 = 18x$, $m\angle 2 = x + y$, and $m\angle 3 = 30z$. Find the value of each variable. The diagram is not to scale.