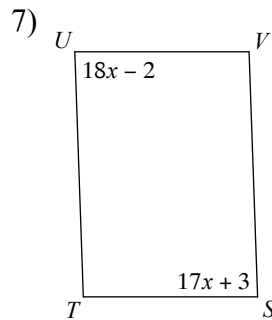
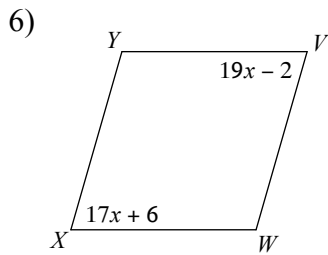


8.2 Properties of Parallelograms

Fill in the blank.

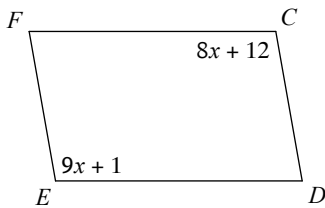
- 1) Diagonals of a parallelogram _____ each other.
- 2) Diagonals of a rectangle are _____.
- 3) Opposite sides of a parallelogram are _____ and _____.
- 4) Opposite angles of a parallelogram are _____.
- 5) Consecutive angles of a parallelogram are _____.

Solve for x . Each figure is a parallelogram.

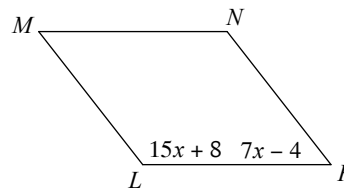


Find the measurement indicated in each parallelogram.

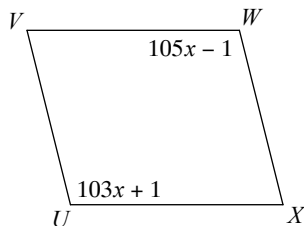
- 8) Find $m\angle E$



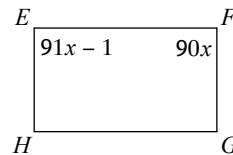
- 9) Find $m\angle M$



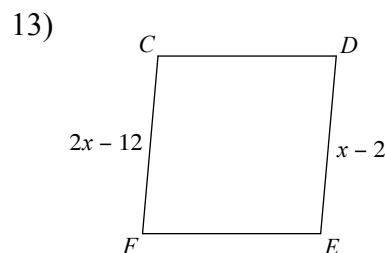
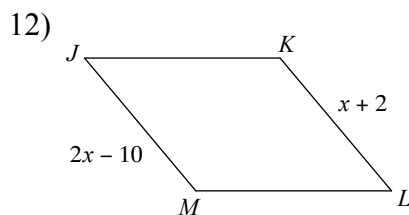
- 10) Find $m\angle X$



- 11) Find $m\angle G$

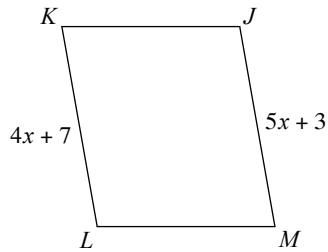


Solve for x . Each figure is a parallelogram.

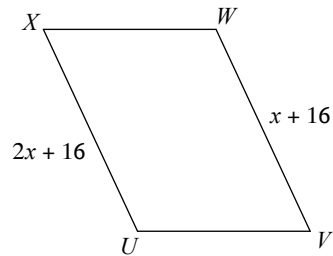


Find the measurement indicated in each parallelogram.

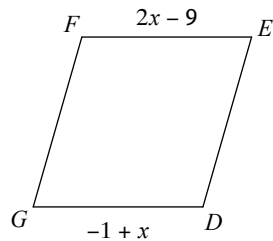
14) Find LK



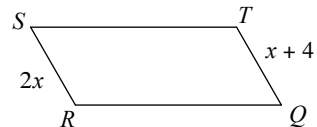
15) Find WV



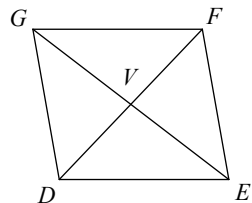
16) Find FE



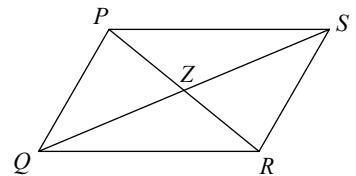
17) Find RS



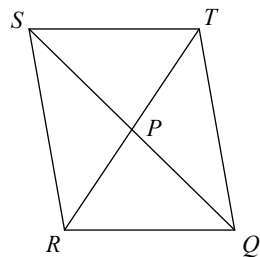
18) $FV = 3x - 3$
 $VD = x + 13$
 Find FD



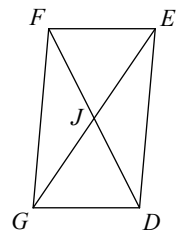
19) $RZ = 6x - 2$
 $RP = 9x + 5$
 Find RZ



20) $RP = 3x + 2$
 $PT = 5x - 2$
 Find RP



21) $FJ = 4x + 5$
 $JD = 2 + 5x$
 Find FD



Based on the information given, prove that opposite angles of a parallelogram are congruent using a two column proof.

22) Given:

- 1) \overline{WXYZ} are the vertices of a parallelogram
- 2) $\overline{WX} \cong \overline{YZ}$
- 3) $\overline{WZ} \cong \overline{XY}$
- 4) \overline{WY} is a diagonal of the parallelogram

Prove: $\angle X \cong \angle Z$