Determine if each quadrilateral is a parallelogram. Explain why or why it does not work.

1)



2)

3)



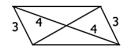
4)



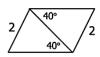
5)



6)



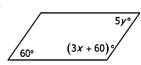
7)

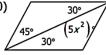




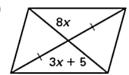
Find the value of x and y that ensure each quadrilateral is a parallelogram.

9)



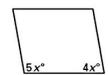


11)



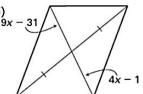


13)

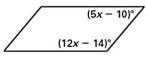


14)

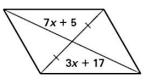




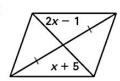
16)



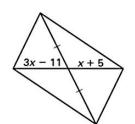
17)

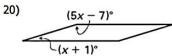


18)



19)

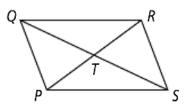




- 21. Use the diagram below to solve for x and y if the figure is a parallelogram.
  - a) PT = 2x, QT = y + 12,

$$TR = x + 2, TS = 7y$$

b) PT = y, TR = 4y - 15,

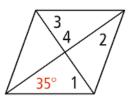


- 22. Find the measure of each angle if the figure is a rhombus.
  - a) Find the  $m \angle 1$ .

b) Find the m∠2.

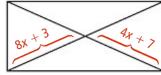
c) Find the  $m \angle 3$ .

d) Find the m∠4.

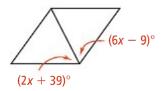


23. Solve for x if the figure is a rhombus.

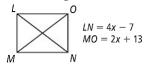
rectangle.



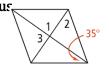
24. Solve for x if the figure is a



25. What is the length of LN if the figure is a rectangle?



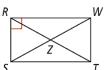
26. Solve for the missing angle measures if the figure is a rhombus



27. What is the length of SW?

$$RZ = 2x + 5,$$

$$SW = 5x - 20$$



28. Solve for x if the figure is a

rhombus.

