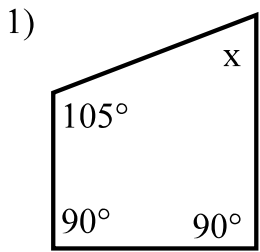
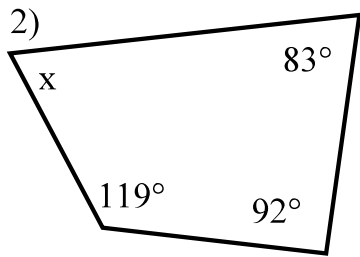


Quadrilaterals 2  
Geometry

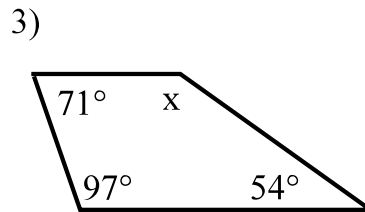
Find the missing angle.



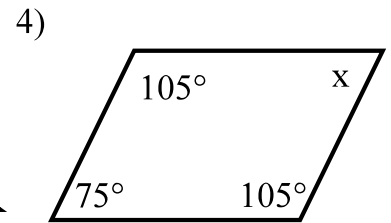
$$\begin{aligned} 105 + 90 + 90 + x &= 360 \\ 285 + x &= 360 \\ -285 \quad -285 & \\ \underline{x = 75^\circ} & \end{aligned}$$



$$\begin{aligned} x + 83 + 92 + 119 &= 360 \\ x + 294 &= 360 \\ -294 \quad -294 & \\ \underline{x = 66^\circ} & \end{aligned}$$

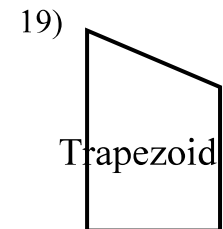
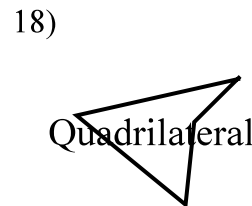
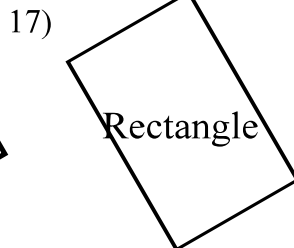
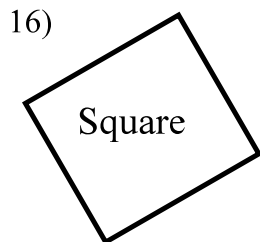
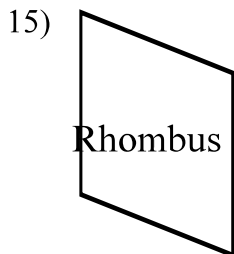
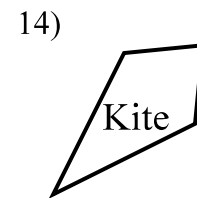
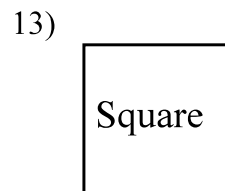
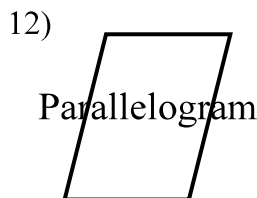
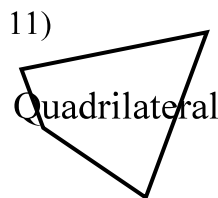
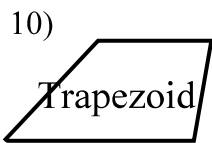
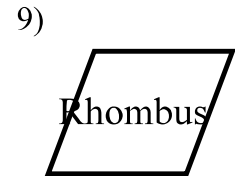
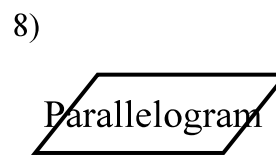
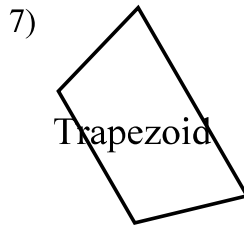
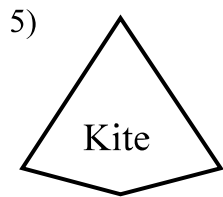


$$\begin{aligned} 71 + x + 54 + 97 &= 360 \\ x + 222 &= 360 \\ -222 \quad -222 & \\ \underline{x = 138^\circ} & \end{aligned}$$



$$\begin{aligned} 105(2) + 75 + x &= 360 \\ 285 + x &= 360 \\ -285 \quad -285 & \\ \underline{x = 75^\circ} & \end{aligned}$$

Identify the quadrilaterals.



Use the words *always*, *sometimes*, or *never* to complete each sentence accurately.

20) A quadrilateral is sometimes a parallelogram.      21) A trapezoid is never a kite.

22) A parallelogram is sometimes a rhombus.      23) A square is always a rhombus.

24) A square is always a rectangle.      25) A trapezoid is always a quadrilateral.

Try to draw a quadrilateral with the following properties. Name each, if possible.

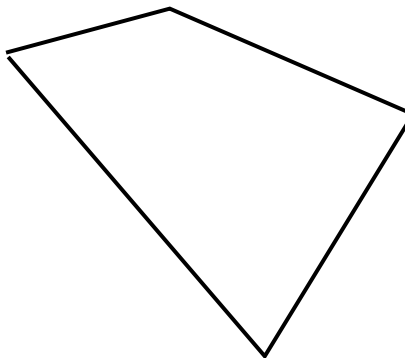
26) Exactly one pair of parallel sides.

**Trapezoid**



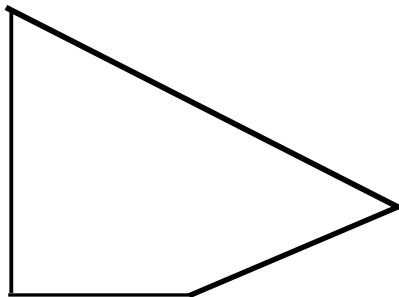
27) Exactly three congruent sides.

**Quadrilateral**



28) Exactly one right angle.

**Quadrilateral**



29) Exactly three acute angles.

**Quadrilateral**

