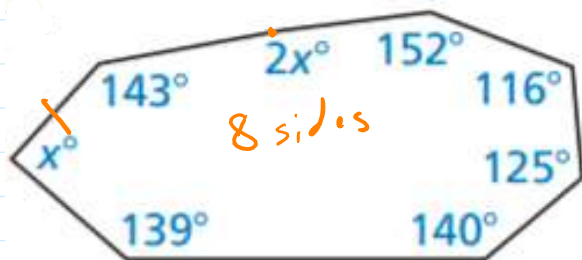


# Quiz Review

Find the value of  $x$ . Show your work.



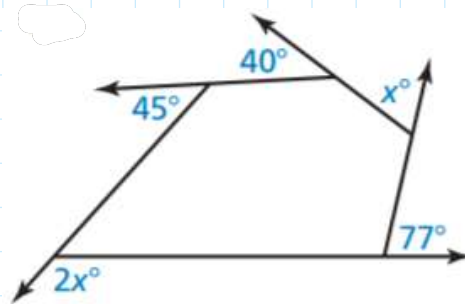
$$\begin{aligned} (n-2)180 \\ (8-2)180 &= 1080 \end{aligned}$$

$$143 + 2x + 152 + 116 + 125 + 140 + 139 + x = 1080$$

$$815 + 3x = 1080$$

$$3x = 265$$

$$x = 88\frac{1}{3}$$



$$40 + 45 + 2x + 77 + x = 360$$

$$162 + 3x = 360$$

$$3x = 198$$

$$x = 66$$

Find the measure of each interior angle and each exterior angle of the indicated regular polygon.

19-gon

$$(19-2)180$$

$$\underline{3060^\circ}$$

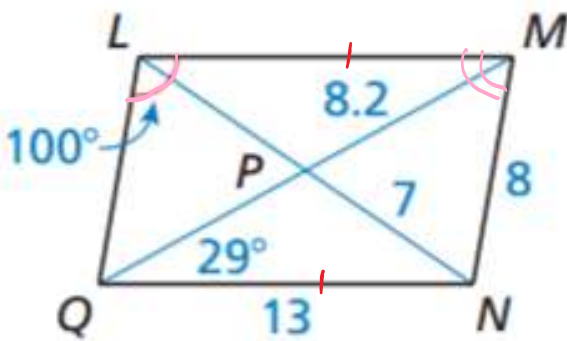
Octagon

$$(8-2)180$$

$$6 \cdot 180$$

$$\underline{1080^\circ}$$

LMNQ is a parallelogram. Find the indicated measures.



$$LM = 13$$

$$180 = 100 + m$$

$$80 = m$$

$$m\angle LMN = 80^\circ$$

$$LN = 14$$

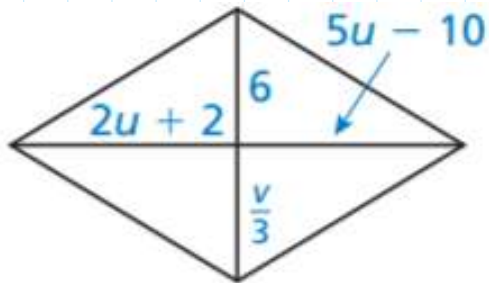
$$7 + 7 = 14$$

$$m\angle QMN = 51^\circ$$

$$80 - 29$$

$$51$$

Solve for each variable assuming that the shape provided is a parallelogram.



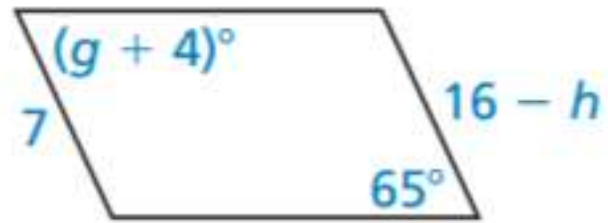
$$2u + 2 = 5u - 10$$

$$12 = 3u$$

$$\underline{4 = u}$$

$$3 \cdot 6 = \frac{v}{3} \cdot 3$$

$$\underline{18 = v}$$



$$g + 4 = 65$$

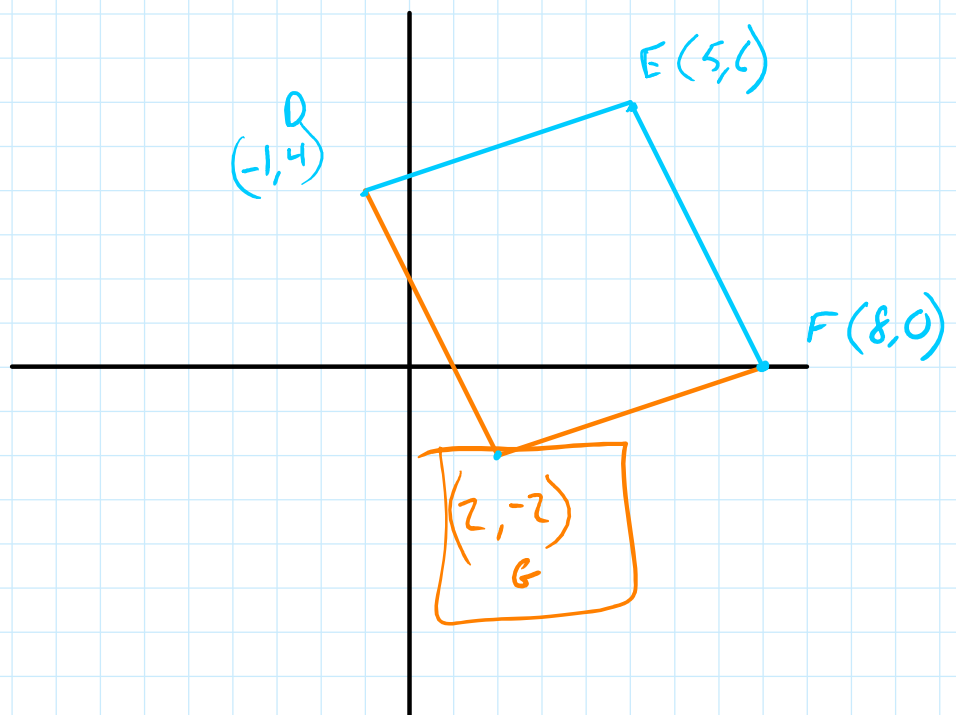
$$\underline{g = 61}$$

$$7 = 16 - h$$

$$-9 = -h$$

$$\underline{9 = h}$$

Three vertices of parallelogram DEFG are given. Find the remaining vertex.  
 D(-1, 4), E(5, 6), F(8, 0)

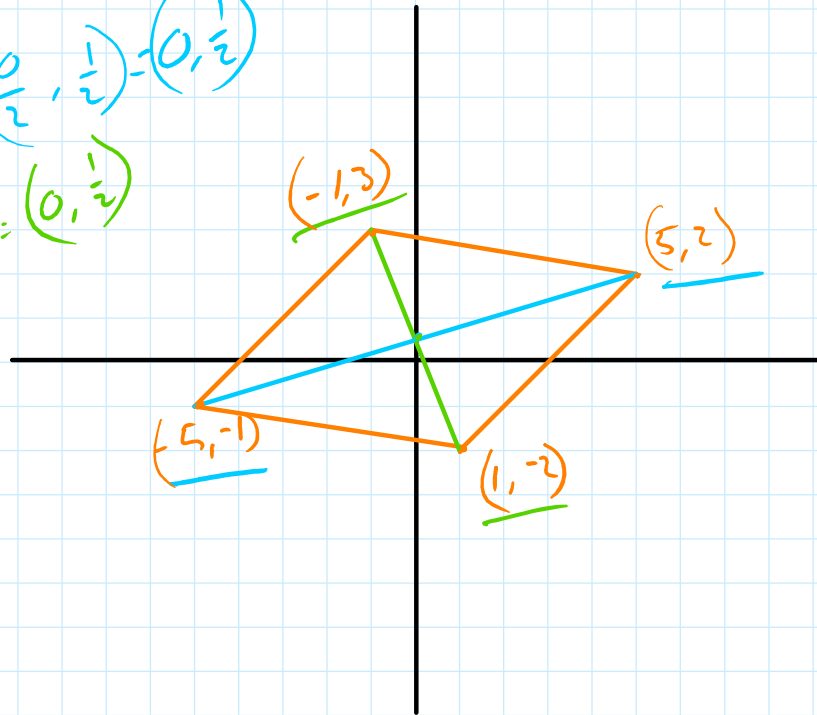


List the coordinates of the intersection of the diagonals of parallelogram QRST  
 Q(-1, 3), R(5, 2), S(1, -2), T(-5, -1)

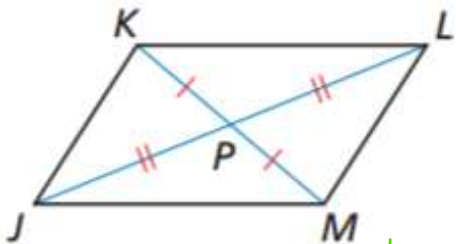
$$\left(\frac{-5+5}{2}, \frac{-1+2}{2}\right) = \left(\frac{0}{2}, \frac{1}{2}\right) = (0, \frac{1}{2})$$

$$\left(\frac{-1+1}{2}, \frac{3+2}{2}\right) = \left(\frac{0}{2}, \frac{5}{2}\right) = (0, \frac{5}{2})$$

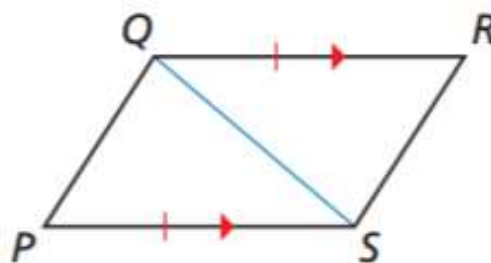
(0, 1/2)



Is the quadrilateral a parallelogram? If so, give a reason.



yes, the diagonals bisect one another.



yes, 1 pair of opposite sides are both parallel and congruent.

---

Graph the quadrilateral with the given vertices in a coordinate plane. Then show that the quadrilateral is a parallelogram.

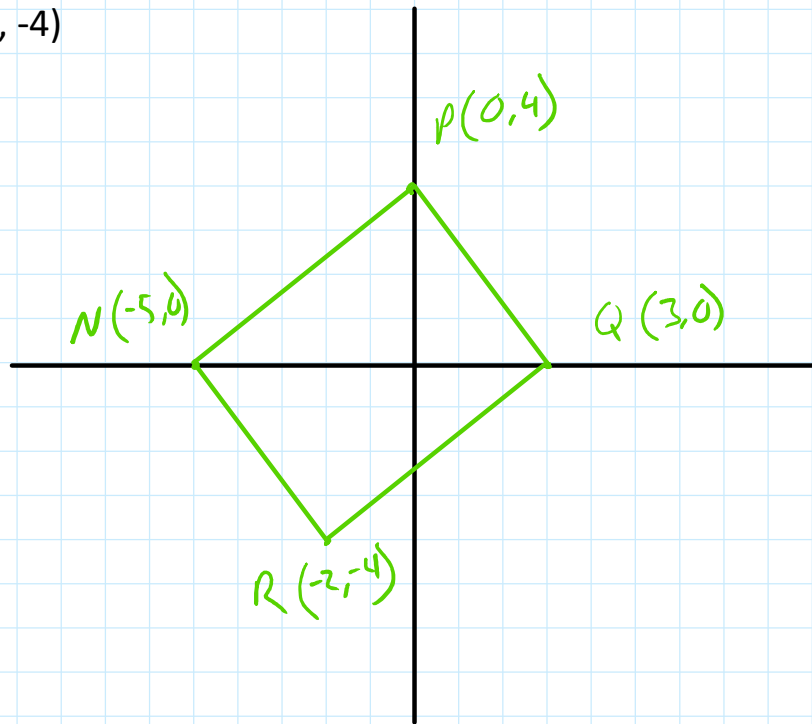
$N(-5, 0)$ ,  $P(0, 4)$ ,  $Q(3, 0)$ ,  $R(-2, -4)$

$$m \overline{NP} = \frac{4}{5}$$

$$m \overline{RQ} = \frac{4}{5}$$

$$m \overline{NR} = \frac{-4}{3}$$

$$m \overline{PQ} = \frac{-4}{3}$$



14 Questions total  
Good Luck!

