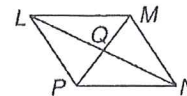


# 8-2 Practice

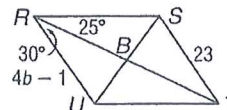
## Parallelograms

Complete each statement about  $\square LMNP$ . Justify your answer.



- $\overline{LQ} \cong$  ?  $\overline{NQ}$ ; diagonal of  $\square$  bisect each other
- $\angle LMN \cong$  ?  $\angle NPL$ ; opp  $\angle$ s of  $\square$  are  $\cong$
- $\triangle LMP \cong$  ?  $\triangle NPM$ ; diagonals of  $\square$  separates into two  $\cong \triangle$ 's
- $\angle NPL$  is supplementary to ?  $\angle MNP$  or  $\angle PLM$ ; consecutive  $\angle$ 's of  $\square$  are suppl
- $\overline{LM} \cong$  ?  $\overline{NP}$ ; opp sides of  $\square$  are  $\cong$

ALGEBRA Use  $\square RSTU$  to find each measure or value.



- $m\angle RST =$  125
- $m\angle STU =$  55
- $m\angle TUR =$  125
- $b =$  6

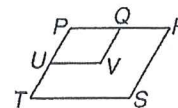
COORDINATE GEOMETRY Find the coordinates of the intersection of the diagonals of parallelogram  $PRYZ$  given each set of vertices.

- $P(2, 5), R(3, 3), Y(-2, -3), Z(-3, -1)$
  - $P(2, 3), R(1, -2), Y(-5, -7), Z(-4, -2)$
- $(0, 1)$     $(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2})$     $(-1.5, -2)$

12. PROOF Write a paragraph proof of the following.

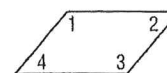
Given:  $\square PRST$  and  $\square PQVU$

Prove:  $\angle V \cong \angle S$



Statements	Given
$\square PRST$ and $\square PQVU$	Given
$\angle P \cong \angle V$	Opp $\angle$ 's $\square$ are $\cong$
$\angle P \cong \angle S$	Opp $\angle$ 's $\square$ are $\cong$
$\angle V \cong \angle S$	Transitive

13. CONSTRUCTION Mr. Rodriguez used the parallelogram at the right to design a herringbone pattern for a paving stone. He will use the paving stone for a sidewalk. If  $m\angle 1$  is 130, find  $m\angle 2$ ,  $m\angle 3$ , and  $m\angle 4$ .



50, 130, 50