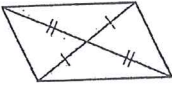
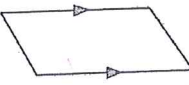


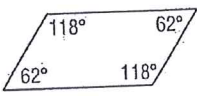
# 8-3 Practice

## Tests for Parallelograms

Determine whether each quadrilateral is a parallelogram. Justify your answer.

1.  *yes*  
Diagonals  
Bisect

2.  *No, Not enough info*

3.  *yes*  
opposite  $\angle$ 's  $\cong$

4.  *NO, Not enough info*

**COORDINATE GEOMETRY** Determine whether a figure with the given vertices is a parallelogram. Use the method indicated.

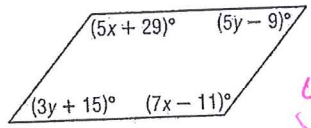
5.  $P(-5, 1), S(-2, 2), F(-1, -3), T(2, -2)$ ; Slope Formula

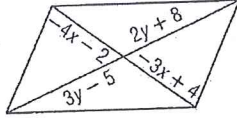
*yes*

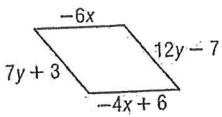
6.  $R(-2, 5), O(1, 3), M(-3, -4), Y(-6, -2)$ ; Distance and Slope Formula

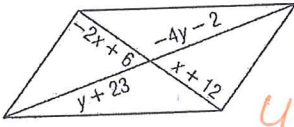
*yes*

**ALGEBRA** Find  $x$  and  $y$  so that each quadrilateral is a parallelogram.

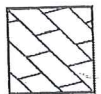
7.  *x=20*  
*y=12*

8.  *x=-6*  
*y=13*

9.  *x=-3*  
*y=2*

10.  *x=-2*  
*y=-5*

11. **TILE DESIGN** The pattern shown in the figure is to consist of congruent parallelograms. How can the designer be certain that the shapes are parallelograms?



*Confirm both pairs of opp.  $\angle$ 's are  $\cong$*