Name $\qquad$ Date $\qquad$ Pd $\qquad$

### 7.2 Parallelogram DAY ONE CYU

$\square$ Use when you get it right all by yourself
$\boldsymbol{S}$ Use when you did it all by yourself, but made a silly mistake
$\boldsymbol{H}$ Use when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
$N$ Use when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Properties of parallelograms | $1,2,3,4$ | 5,6 | $7,8,9$ |
| Parallel lines \& transversals | $14-16$ |  | $10-13$ |
| Applying the properties |  |  |  |
|  |  |  |  |

1. Find the value of each variable in the parallelogram.

2. Find the measure of the indicated angle in the parallelogram. Find $m \angle B$.


Find the indicated measure in parallelogram LMNQ. Explain your reasoning in words or with work.
3. LM
4. $\mathrm{m} \angle \mathrm{LMN}$


Find the value of each variable in the parallelogram.
5.

6.

7. ERROR ANALYSIS Describe and correct the error in using properties of parallelograms.


Because quadrilateral STUV is a
parallelogram, $\angle S \cong \angle V$. So, $m \angle V=50^{\circ}$.
8. Find the coordinates of the intersection of the diagonals of the parallelogram with given vertices:
$W(-2,5), X(2,5), Y(4,0), \& Z(0,0)$.
9. Three vertices of parallelogram DEFG are given. Find the coordinates of the remaining vertex. $D(0,2), E(-1,5), \& G(4,0)$
10. MATHEMATICAL CONNECTIONS Find the measure of each angle if the measure of one interior angle of a parallelogram is 0.25 times the measure of another angle.
11. MAKING AN ARGUMENT In quadrilateral ABCD, $\mathrm{m} \angle \mathrm{B}=124^{\circ}, \mathrm{m} \angle \mathrm{A}=56^{\circ}$, and $\mathrm{m} \angle \mathrm{C}=124^{\circ}$. Your friend claims quadrilateral $A B C D$ could be a parallelogram. Is your friend correct? Explain your reasoning.
12. ATTENDING TO PRECISION $\angle \mathrm{J} \& \angle \mathrm{~K}$ are consecutive angles in a parallelogram, $\mathrm{m} \angle \mathrm{J}=(3 \mathrm{x}+7)^{\circ}$, and $m \angle K=(5 x-11)^{\circ}$. Find the measure of each angle.
13. PROBLEM SOLVING In parallelogram LMNP, the ratio of LM to MN is $4: 3$. Find LM when the perimeter of parallelogram LMNP is 28.

Determine whether lines I and $m$ are parallel. Justify your answer.
14.

15.

16.


CYU Reflection: How far can you go: basic, intermediate, or advanced?
Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.


