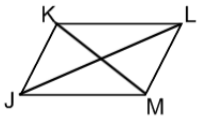
64Parallelogram Proofs Name _____ Block_____

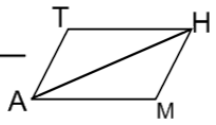
Complete the following proofs

1. Given: JKLM is a parallelogram
Prove: ∠LMJ≅ ∠JKL and ∠KJM≅ ∠MLK



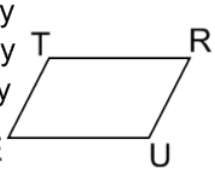
Statement	Reason
JKLM is a ▱	_____
_____	Def. of ▱
∠JLK≅ ∠LJM	_____
_____	Alt. Int. ∠'s Thm.
_____	Reflexive Property
ΔJLK≅ΔLJM	_____
_____	CPCTC
∠LKM≅∠JMK	Alt. Int. ∠'s Thm.
_____	Alt. Int. ∠'s Thm.
$\overline{KM}\cong\overline{MK}$	_____
_____	ASA
∠KJM≅∠MLK	_____

2. Given: MATH is a parallelogram
Prove: $\overline{AT}\cong\overline{HM}$ and $\overline{TH}\cong\overline{MA}$



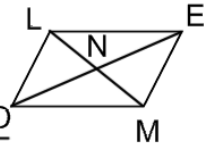
Statement	Reason
_____	Given
$\overline{AT}\parallel\overline{MH}$ and $\overline{TH}\parallel\overline{AM}$	_____
_____	Alt. Int.∠'s Thm.
_____	Alt. Int.∠'s Thm.
$\overline{AH}\cong\overline{HA}$	_____
_____	ASA
$\overline{AT}\cong\overline{HM}$	_____
_____	CPCTC

3. Given: TRUE is a parallelogram
Prove: ∠T and ∠R are supplementary
∠R and∠U are supplementary
∠U and∠E are supplementary
∠E and∠T are supplementary



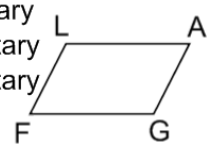
Statement	Reason
TRUE is a ▱	_____
_____	Def. of ▱
∠T and ∠R are supp.	_____
_____	Same Side Int.∠'s Thm.
∠R and∠U are supp.	_____
_____	Same Side Int.∠'s Thm.

4. Given: LEMO is a parallelogram
Prove: $\overline{LN}\cong\overline{MN}$ and $\overline{ON}\cong\overline{EN}$



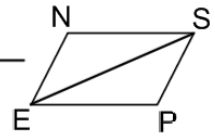
Statement	Reason
_____	Given
$\overline{LO}\parallel\overline{EM}$ and $\overline{OM}\parallel\overline{LE}$	_____
_____	Alt. Int.∠'s Thm.
∠LOE=∠MEO	_____
_____	▱ ->Opp. Sides of are ≅
_____	ASA
$\overline{LN}\cong\overline{MN}$	_____
_____	CPCTC

5. Given: FLAG is a parallelogram
Prove: ∠F and ∠L are supplementary
∠L and ∠A are supplementary
∠A and ∠G are supplementary
∠G and ∠F are supplementary



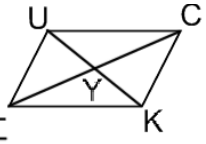
Statement	Reason

6. Given: PENS is a parallelogram
Prove: $\overline{PE} \cong \overline{NS}$ and $\overline{EN} \cong \overline{SP}$



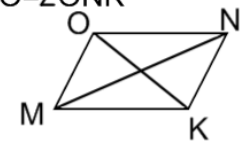
Statement	Reason

7. Given: LUCK is a parallelogram
Prove: $\overline{LY} \cong \overline{CY}$ and $\overline{UY} \cong \overline{KY}$



Statement	Reason

8. Given: JKLM is a parallelogram
Prove: ∠MON ≅ ∠NKM and ∠KMO ≅ ∠ONK



Statement	Reason