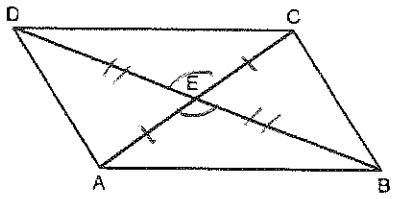
Independent Practice

Given: Quadrilaterial ABCD is a parallelogram

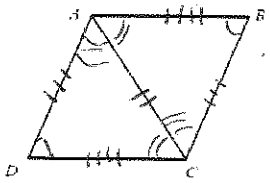
Prove: $\Delta AEB \cong \Delta CED$



statement	reason
(1) ABCD is a Parallelogram	(1) given
(2) diagonals bisect each other	(2) diagonals of □ bisect each other
(3) $\overline{DE} \cong \overline{BE}$	(3) segment bisectors divide lines in 2 $\cong$ parts
(4) $\overline{AE} \cong \overline{EC}$	(4) "
(5) $\angle DEC \cong \angle AEB$	(5) vertical $\angle$s $\cong$
(6) $\Delta AEB \cong \Delta CED$	(6) SAS $\cong$

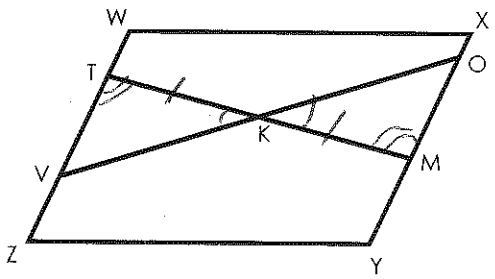
Given: Quadrilaterial ABCD is a parallelogram

Prove: $\Delta DAC \cong \Delta BCA$

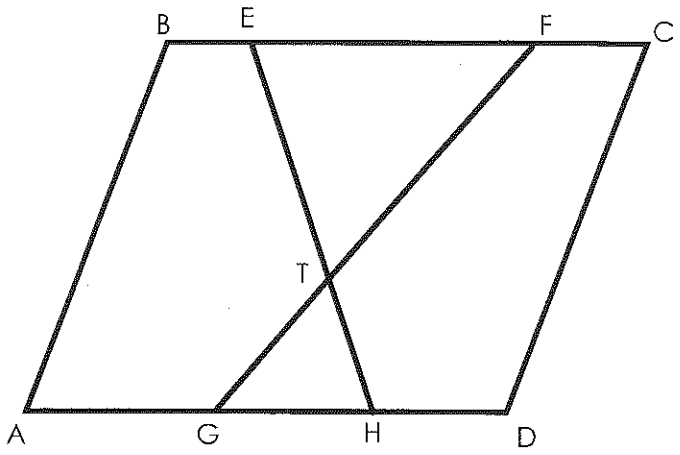


Given: WXYZ is a parallelogram and K is the midpoint of $\overline{TM}$.

Prove: $\triangle TKV \cong \triangle MKO$



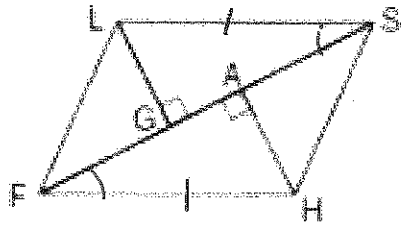
statement	reason
(1) WXYZ is a □	(1) given
(2) K is midpoint of TM	(2) given
(3) $\overline{TK} \cong \overline{KM}$	(3) midpoint divides a line in 2 $\cong$ parts
(4) $\angle TKV \cong \angle OKM$	(4) Vertical $\angle$s $\cong$
(5) $\overline{WZ} \parallel \overline{XY}$	(5) opposite sides of □ are $\parallel$
(6) $\angle VTK \cong \angle OMK$	(6) Alt int $\angle$s $\cong$
(7) $\Delta TKV \cong \Delta MKO$	(7) ASA $\cong$



Given: ABCD is a parallelogram

Prove: $\triangle GTH \sim \triangle FTE$

Given: parallelogram *FLSH*, diagonal $\overline{FGAS}$, $\overline{LG} \perp \overline{FS}$, $\overline{HA} \perp \overline{FS}$



Prove: $\triangle LGS \cong \triangle HAF$

Statement	Reason
(1) FLSH is a ▱	(1) given
(2) $\overline{LG} \perp \overline{FS}$	(2) given
(3) $\overline{HA} \perp \overline{FS}$	(3) given
(4) $\angle LGS$ and $\angle FAH$ are right $\angle$'s	(4) def of $\perp$
(5) $\angle LGS \cong \angle FAH$	(5) All right $\angle$'s $\cong$
(6) $\overline{FH} \cong \overline{LS}$	(6) opp sides of ▱ are $\cong$
(7) $\overline{FH} \parallel \overline{LS}$	(7) opp sides of ▱ are $\parallel$
(8) $\angle SAH \cong \angle LSG$	(8) Alt int $\angle$'s $\cong$
(9) $\triangle LGS \cong \triangle HAF$	(9) AAS $\cong$