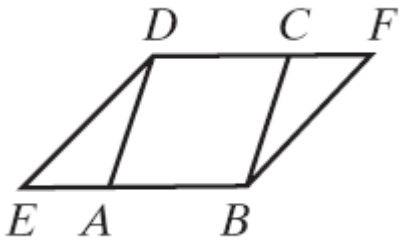
Name: _____

Parallelograms

1) Given: Parallelogram EBFD and parallelogram ABCD with $\overline{EAB}$ and $\overline{DCF}$

Prove: $\square EAD \cong \square FCB$



2) $ABCD$ is a quadrilateral with $\overline{AB} \parallel \overline{CD}$ and $\angle A \cong \angle C$ .Prove that ABCD is a parallelogram

3) ABCD is a parallelogram. E is the midpoint of $\overline{AB}$ and F is the midpoint of $\overline{CD}$ .Prove that AEFD is a parallelogram.

4) PQRS is a quadrilateral with $\angle P \cong \angle R$ and $\angle P$ the supplement of $\angle Q$. Prove that PQRS is a parallelogram

5) DEFG is a quadrilateral with $\overline{DF}$ drawn so that $\angle FDE \cong \angle DFG$ and $\angle GDF \cong \angle EFD$. Prove that DEFG is a parallelogram.

6) The midpoints of the sides of quadrilateral $ABCD$ are M, N, P, and Q. Prove that quadrilateral MNPQ is a parallelogram. (Hint: Draw $\overline{AC}$)

7) Find each lettered angle measure knowing that AEFB is a parm