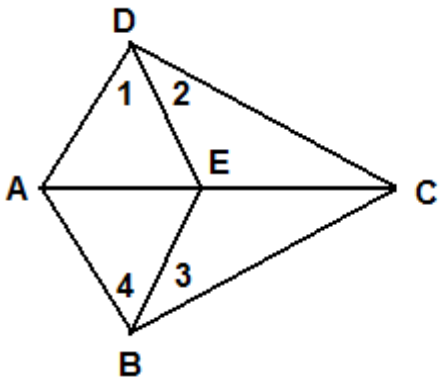
Advanced Geometry **Name:** _____
Yet More Interesting Proofs

1.)



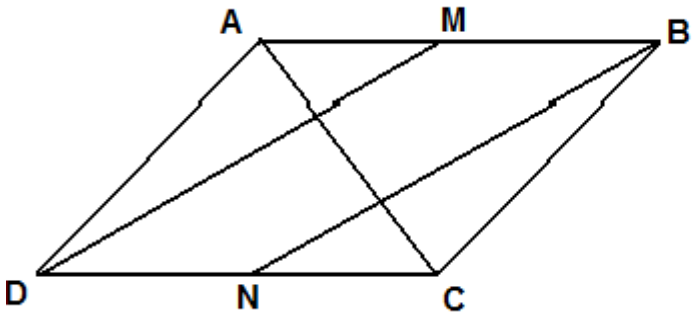
Given:

$\angle 4 \cong \angle 1$
$\angle 2 \cong \angle 3$
$\angle DAC \cong \angle 1$
$\angle CAB \cong \angle 4$
$\overline{AD} \cong \overline{AB}$

Prove:

$\overline{CD} \cong \overline{CB}$

2.)



Given:

$\overline{AB} \cong \overline{CD}$

M is the midpoint of $\overline{AB}$

N is the midpoint of $\overline{CD}$

$\angle BMD \cong \angle DNB$

$\angle BAC \cong \angle DCA$

$\angle ACB \cong \angle DAC$

Prove: $\overline{DM} \cong \overline{BN}$