

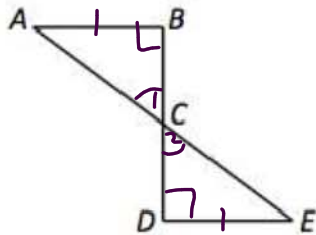
Name: _____

Date: _____

Proofs Review Do Now

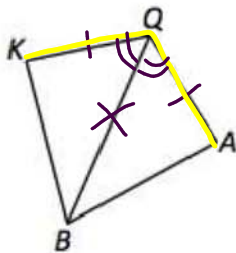
Mr. Valentino

1. **Given:** $BD \perp AB, BD \perp DE, AB \cong DE$
Prove: $\angle A \cong \angle E$



statement	reason
① $\overline{BD} \perp \overline{AB}$ $\overline{BD} \perp \overline{DE}$	① Given
② $\overline{AB} \cong \overline{DE}$	② Given
③ $\angle B$ and $\angle D$ are right \angle 's	③ \perp lines form right angles
④ $\angle B \cong \angle D$	④ All right \angle 's are \cong
⑤ $\angle 1 \cong \angle 2$	⑤ Vertical \angle 's are \cong
⑥ $\triangle ABC \cong$ $\triangle CDE$	⑥ AAS \cong AAS
⑦ $\angle A \cong \angle E$	⑦ CPCTC

2. **Given:** $QK \cong QA, QB$ bisects $\angle KQA$
Prove: $KB \cong AB$



statement	reason
① $\overline{QK} \cong \overline{QA}$	① Given
② \overline{QB} bisects $\angle KQA$	② Given
③ $\angle KQB \cong$ $\angle AQB$	③ Definition of Angle Bisector
④ $\overline{QB} \cong \overline{QB}$	④ reflexive Prop.
⑤ $\triangle KQB \cong \triangle AQB$	⑤ SAS \cong SAS
⑥ $\overline{KB} \cong \overline{AB}$	⑥ CPCTC