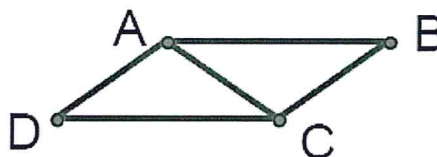# Congruent Triangle Proofs

The proofs below are ordered from easiest to hardest. Do not leave any blank!

1.

Given: $\overline{AB} \cong \overline{CD}$
$\overline{BC} \cong \overline{DA}$
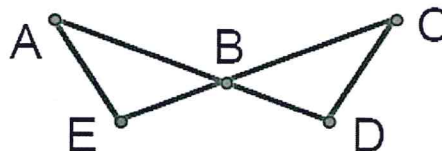Prove: $\triangle ABC \cong \triangle CDA$

STATEMENTS	REASONS

2.

Given: $\overline{AB} \cong \overline{CB}$
$\overline{EB} \cong \overline{DB}$
Prove: $\triangle ABE \cong \triangle CBD$

STATEMENTS	REASONS

3.
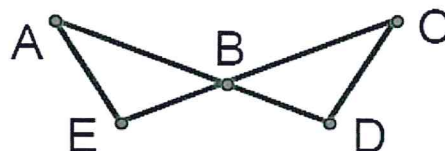
Given: $\angle A \cong \angle C$
$\overline{AB} \cong \overline{CB}$
Prove: $\triangle ABE \cong \triangle CBD$

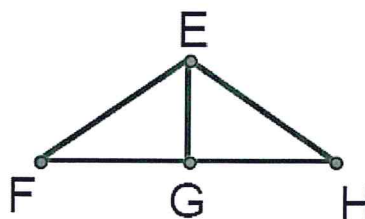| STATEMENTS	REASONS

Congruent Triangle Proofs

Given: G is the midpoint of $\overline{FH}$
$\overline{EF} \cong \overline{EH}$
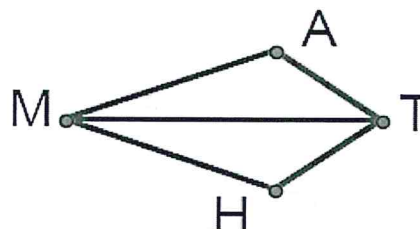Prove: $\triangle FGE \cong \triangle HGE$

10.

STATEMENTS	REASONS

Given: $\overline{MT}$ bisects $\angle AMH$
$\overline{MT}$ bisects $\angle ATH$
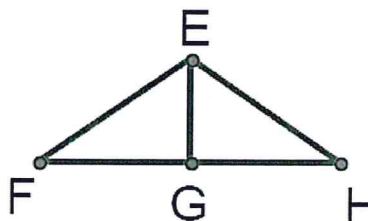Prove: $\triangle MAT \cong \triangle MHT$

11.

STATEMENTS	REASONS

Given: $\triangle FHE$ is isosceles
$\overline{EG}$ bisects $\angle FEH$
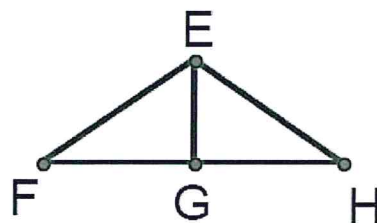Prove: $\triangle FGE \cong \triangle HGE$

12.

STATEMENTS	REASONS

Congruent Triangle Proofs

Given: Δ FHE is isosceles
        G is the midpoint of $\overline{FH}$
Prove: Δ FGE ≅ Δ HGE

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STATEMENTS	REASONS

Given: $\overline{AB} \parallel \overline{CD}$
        $\overline{BC} \parallel \overline{DA}$
Prove: Δ ABC ≅ Δ CDA

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STATEMENTS	REASONS

Given: $\overline{AB} \parallel \overline{CD}$
        $\overline{AB} \cong \overline{CD}$
Prove: Δ ABC ≅ Δ CDA

15

STATEMENTS	REASONS