****

**Given:** ,

is the midpoint of ,

is the midpoint of

**Prove:**

**Statements Reasons**

Given

is the midpoint of

is the midpoint of

and Midpoint Theorem

and Definition of Segments

and Segment Addition

Substitution Property

Substitution Property

Substitution Property

Division Property

**Given:**

**Prove:**

**Statements Reasons**

Given

Definition of a Midpoint

Definition of Segments

Multiplication Property

Substitution Property (Steps 2 & 4)



# A B C D

**Given:**

**Prove:**

**Statements Reasons**

Given

Segment Addition

Substitution Property (Steps 1 & 2)

Symmetric Property

Substitution Property (Steps 2, 3, & 4)

Definition of Segments



**Given:**

**Prove:**

**Statements Reasons**

Given

Substitution Property

Substitution Property

Subtraction Property

Division Property

**Given:**

**Prove:**

**Statements Reasons**

Given

Linear Pairs are Supplementary

Definition of Supplementary Angles

Substitution Property

Subtraction Property