

## Given:

- Segment AD bisects segment $B C$.
- Segment BC bisects segment $A D$.


## Prove:

- $\triangle A B M$ and $\triangle D C M$ are congruent.

| Statement | Reason |
| :--- | :--- |
| 1. Segment $A D$ bisects segment $B C$. | 1. Given. |
| 2. Segments $A M$ and $M D$ are congruent. | 2. When a segment is bisected, the two |
|  | resulting segments are congruent. |
| 3. Segment $B C$ bisects segment $A D$. | 3. Given. |
| 4. Segments $B M$ and $C M$ are congruent. | 4. When a segment is bisected, the two |
|  | resulting segments are congruent. |
|  | 5. Verticle angles are congruent. |
| 5. $\angle A M B$ and $\angle D M C$ are congruent. | 6. SAS postulate $(2,4,5)$. |

