**2 Column Proofs**:

A deductive argument that contains statements and reasons organized in two columns.

Problem 1: Given: , 

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |

Problem 2: Given: ,

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |
| 5. | 5. |

Problem 3: Given: ,

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |

Problem 4: Given: 

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |

**Choices for problems #1 – 4 (some will be used more than once):**

AAS

ASA

Alternate Interior Angles are ≅

Right Angle Congruence

Given

Reflexive Property

SAS

SSS

Vertical Angles are ≅

Problem 5: Given:, 

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |

Problem 6: Given:, 

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |

Problem 7: Given:  and are right angles**, **

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. Right Angle Congruence |
| 3. | 3. |
| 4. | 4. Reflexive Property |
| 5. | 5. |

Problem 8: Given: , 

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. Vertical Angles |
| 4. | 4. |

Problem 9: Given: 

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |