**Part 1**

Using the techniques discussed in class. Prove each problem by using some or all of the cards mentioned in the problem. Complete a two-column proof for each exercise, with statements and reasons in the columns. A reason is needed for each statement. The final statement will be the item being proved.

**Example**:

**Given**: Yellow 4

In your hand you have Red 4, Blue Draw 2, Blue Skip, Green Skip and Green 4.

**Prove:** Blue Draw 2

|  |  |
| --- | --- |
| **Statement** | **Reason** |
| Yellow 4 | Given |
| Green 4 | Same Number |
| Green Skip  | Same Color |
| Blue Skip | Same Symbol |
| Blue Draw 2 | Same Color |

All cards could have been played with an additional step by starting the proof with the Red 4.

1. **Given**: Green Draw 2

In your hand you have Yellow 8, Blue 6, Red Skip and Green Skip.

**Prove:** Red 4

|  |  |
| --- | --- |
| **Statement**  | **Reason** |
|  |  |
|  |  |
|  |  |
|  |  |

1. **Given**: Red Draw 2

In your hand you have Red 8, Yellow 9, Green 9, Green 6, Blue 8, Blue Draw 2 and Red 4

**Prove**: Yellow 4

|  |  |
| --- | --- |
| **Statement**  | **Reason** |
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|  |  |
|  |  |
|  |  |

3) **Given:** Blue 6

 You have in your hand Green Reverse, Blue Reverse and a Wild Card.

 **Prove:** Red 7

|  |  |
| --- | --- |
| **Statement**  | **Reason** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

4) **Given:** Yellow Draw 2

 In your hand you have Green 6, Red 6, Red Reverse, Red Draw 2 and Yellow 6.

 **Prove:** Green 7

|  |  |
| --- | --- |
| **Statement**  | **Reason** |
|  |  |
|  |  |
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|  |  |
|  |  |

**Part 2**

**Given:** T = 30

 VUS = 135

**Prove:** S = 105

|  |  |
| --- | --- |
| **Statement** | **Reason** |
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|  |  |
|  |  |