

Use the KMaps below so that everyone's will be the same. (Makes the TA's life much easier, and really, isn't that what it's all about?)

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 00 | X | 0 | 0 | X |
| 01 | X | 0 | 1 | X |
| 11 | X | X | X | X |
| 10 | X | X | X | X |

J2 = Q0Q1

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 00 | X | X | X | X |
| 01 | X | X | X | X |
| 11 | X | X | X | X |
| 10 | X | 0 | 1 | X |

K2 = Q0

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 00 | X | 0 | 1 | X |
| 01 | X | X | X | X |
| 11 | X | X | X | X |
| 10 | X | 0 | 0 | X |

J1 = Q0Q2

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 00 | X | X | X | X |
| 01 | X | 0 | 1 | X |
| 11 | X | X | X | X |
| 10 | X | X | 1 | X |

K1 = Q0

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 00 | X | 1 | X | X |
| 01 | X | 1 | X | X |
| 11 | X | X | X | X |
| 10 | X | 1 | X | X |

J0 = Q0

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 00 | X | X | 1 | X |
| 01 | X | X | 1 | X |
| 11 | X | X | X | X |
| 10 | X | X | 1 | X |

K0 = Q0

| Q2 \ Q1 \ Q0 | INPUT | | | |
|--------------|-------|----|----|----|
| | 00 | 01 | 11 | 10 |
| 0 | 0 | 1 | 1 | 1 |
| 1 | 1 | 1 | X | 1 |

$$\text{OUTPUT} = Q2 + Q1 + Q0$$