

Computer Systems

**Week 1 Assessment Tasks**  
**SIT111 - Task 1.2P**

a. NOT ( P ) OR NOT ( Q )

| P | Q | NOT ( P ) | NOT ( Q ) | NOT ( P ) OR NOT ( Q ) |
|---|---|-----------|-----------|------------------------|
| 0 | 0 | 1         | 1         | 1                      |
| 0 | 1 | 1         | 0         | 1                      |
| 1 | 0 | 0         | 1         | 1                      |
| 1 | 1 | 0         | 0         | 0                      |

b. ( P AND Q ) OR ( NOT ( P AND Q ) )

| P | Q | P AND Q | NOT ( P AND Q ) | ( P AND Q ) OR ( NOT ( P AND Q ) ) |
|---|---|---------|-----------------|------------------------------------|
| 0 | 0 | 0       | 1               | 1                                  |
| 0 | 1 | 0       | 1               | 1                                  |
| 1 | 0 | 0       | 1               | 1                                  |
| 1 | 1 | 1       | 0               | 1                                  |

c. P AND (Q OR R)

| P | Q | R | Q OR R | P AND (Q OR R) |
|---|---|---|--------|----------------|
| 0 | 0 | 0 | 0      | 0              |
| 0 | 0 | 1 | 1      | 0              |
| 0 | 1 | 0 | 1      | 0              |
| 0 | 1 | 1 | 1      | 0              |
| 1 | 0 | 0 | 0      | 0              |
| 1 | 0 | 1 | 1      | 1              |
| 1 | 1 | 0 | 1      | 1              |
| 1 | 1 | 1 | 1      | 1              |