Dæmaskammtur 2 - GHSR

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2.1

a)

| X | У | \mathbf{z} | (x+y+z) | x'y'z' |
|---|---|--------------|---------|--------|
| 1 | 1 | 1 | 0 | 0 |
| 0 | 1 | 1 | 0 | 0 |
| 1 | 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 1 |

| X | У | Z | (xyz)' | x'+y'+z' |
|---|---|---|--------|----------|
| 1 | 1 | 1 | 0 | 0 |
| 0 | 1 | 1 | 1 | 1 |
| 1 | 0 | 1 | 1 | 1 |
| 0 | 0 | 1 | 1 | 1 |
| 1 | 1 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 1 | 1 |

b)

| X | У | \mathbf{z} | x+yz | (x+y)(x+z) |
|---|---|--------------|------|------------|
| 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | 1 | 1 | 1 |
| 1 | 0 | 1 | 1 | 1 |
| 0 | 0 | 1 | 0 | 0 |
| 1 | 1 | 0 | 1 | 1 |
| 0 | 1 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 |

c)

| X | у | Z | x(y+z) | xy+xz |
|---|---|---|--------|-------|
| 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | 1 | 0 | 0 |
| 1 | 0 | 1 | 1 | 1 |
| 0 | 0 | 1 | 0 | 0 |
| 1 | 1 | 0 | 1 | 1 |
| 0 | 1 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

d)

| X | у | Z | x+(y+z) | (x+y)+z |
|---|---|---|---------|---------|
| 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | 1 | 1 | 1 |
| 1 | 0 | 1 | 1 | 1 |
| 0 | 0 | 1 | 1 | 1 |
| 1 | 1 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 |

e)

| x | У | Z | x(yz) | (xy)z |
|---|---|---|-------|-------|
| 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | 1 | 0 | 0 |
| 1 | 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |