

$$2-2a) \quad W = \overline{A+B}$$

$$X = \overline{A}$$

$$Y = \overline{WX} = \overline{(\overline{A+B})\overline{A}}$$

| A | B | W | X | Y |
|---|---|---|---|---|
| 0 | 0 | 1 | 1 | 0 |
| 0 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 0 | 1 |
| 1 | 1 | 0 | 0 | 1 |

$$b) \quad Y = \overline{(\overline{A+B})\overline{A}} = \overline{\overline{A+B}} + \overline{\overline{A}} = A+B+A = A+B$$