

$$\bar{z}xy + z\bar{x}y + zx\bar{y} + zxy$$

$$\bar{z}xy + z\bar{x}y + zx(\bar{y} + y)$$

$$\bar{z}xy + z\bar{x}y + zx(y + \bar{y})$$

$$\bar{z}xy + z\bar{x}y + zx(\underline{\quad})$$

$$\bar{z}xy + z\bar{x}y + zx$$

$$\bar{z}xy + z(\bar{x}y + \underline{x})$$

$$\bar{z}xy + z(\bar{x}y + \underline{x+xy})$$

$$\bar{z}xy + z(\bar{x}y + xy + x)$$

$$\bar{z}xy + z((\bar{x} + x)y + x)$$

$$\bar{z}xy + z(\underline{\quad})y + x)$$

$$\bar{z}xy + z(1 \cdot y + x)$$

$$\bar{z}xy + z(y + x)$$

$$\bar{z}xy + \underline{\quad}$$

$$(\bar{z}x + \underline{z})y + zx$$

$$(\bar{z}x + \underline{z+zx})y + zx$$

$$zx + \bar{z}x + \underline{z}y + zx$$

$$(\underline{\quad})x + z)y + zx$$

$$(1x + z)y + zx$$

$$(\underline{\quad} + z)y + zx$$

$$xy + zy + zx$$

Distributive
Commutative
Complement
Identity

Absorption

Commutative

Distributive

Commutative

Distributive

Complement

Identity

Distributive