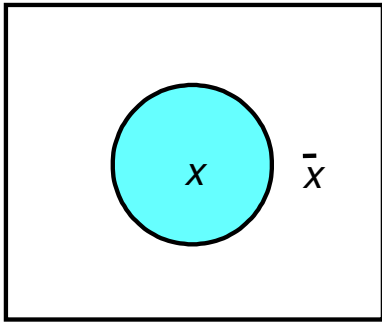


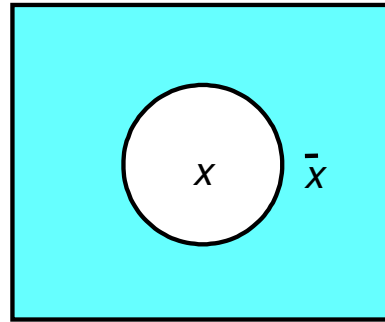
**Constant 1**



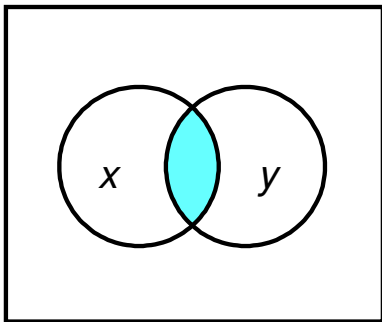
**Constant 0**



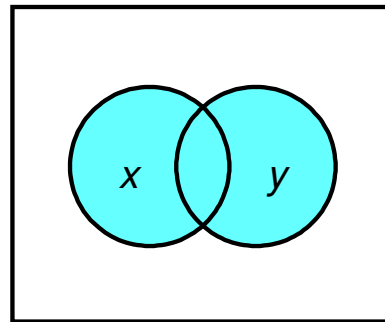
**(c) Variable  $x$**



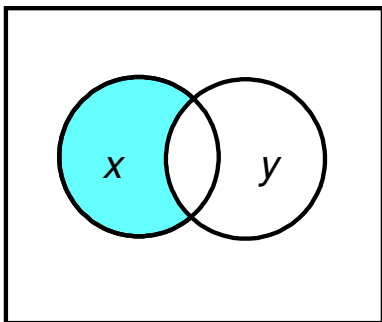
**$\bar{x}$**



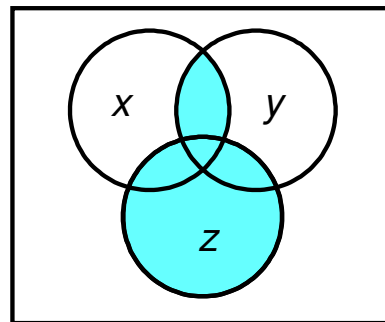
**$x \cdot y$**



**$x + y$**

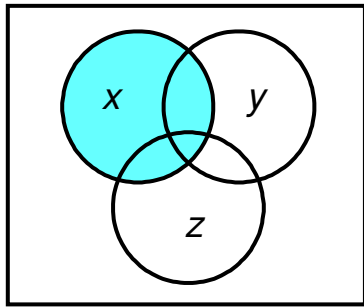


**$x \cdot \bar{y}$**

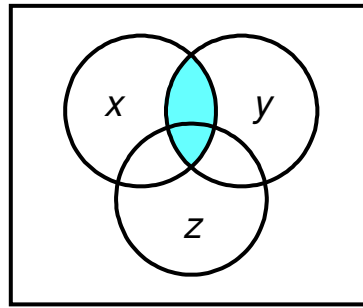


**$x \cdot y + z$**

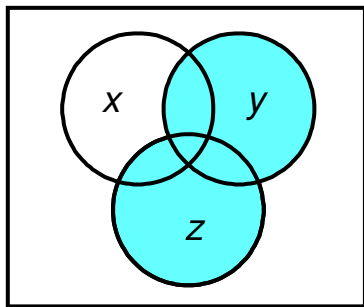
**The Venn diagram representation**



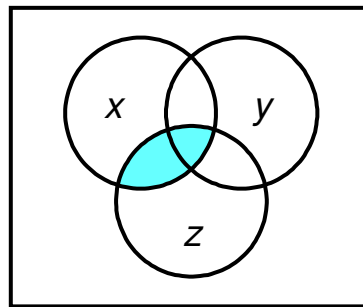
**$x$**



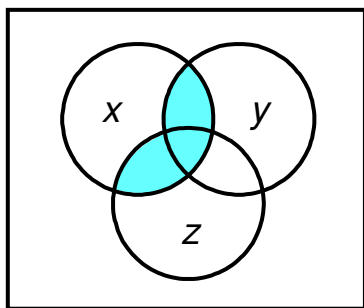
**$x \cdot y$**



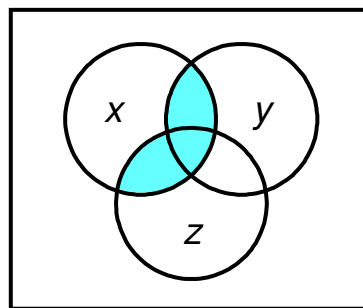
**$y + z$**



**$x \cdot z$**

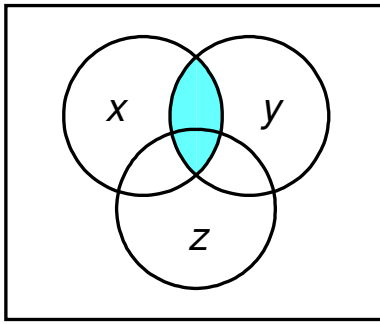


**$x \cdot (y + z)$**

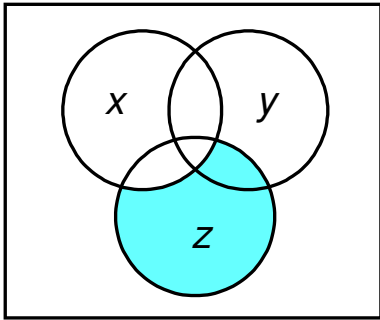


**$x \cdot y + x \cdot z$**

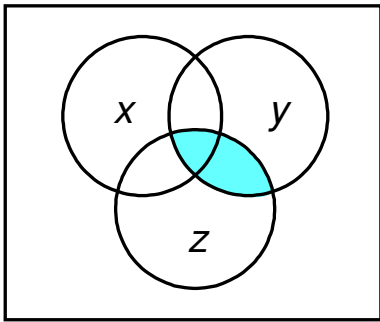
**Verification of the distributive property**



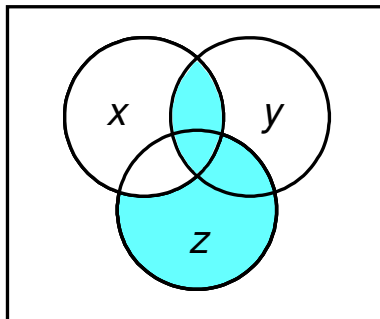
$$x \cdot y$$



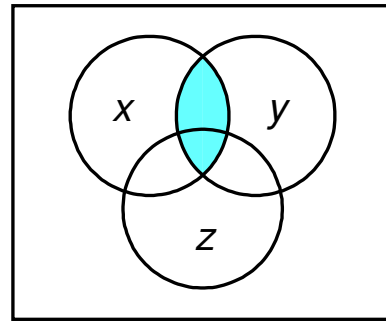
$$\bar{x} \cdot z$$



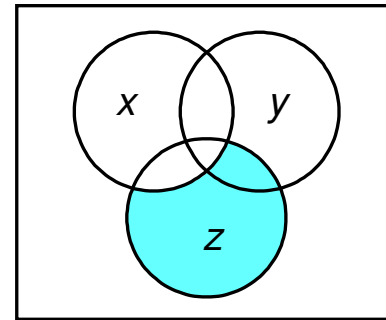
$$y \cdot z$$



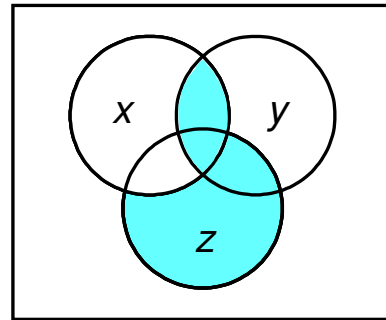
$$x \cdot y + \bar{x} \cdot \bar{z} + y \cdot z$$



$$x \cdot y$$



$$\bar{x} \cdot z$$



$$x \cdot y + \bar{x} \cdot z$$

Verification of  $x \cdot y + \bar{x} \cdot z + y \cdot z = x \cdot y + \bar{x} \cdot z$