

*Composition of function:*

The composition of  $f$  with  $g$  denoted by  $f \circ g(x)$ .

$$f \circ g(x) = f(g(x))$$

$$g \circ f(x) = g(f(x))$$

Let  $f: A \rightarrow B$  and  $g: B \rightarrow C$ , to find the composition function  $g \circ f: A \rightarrow C$

$$(g \circ f)(a) = g(f(a)) = g(y) = t$$

$$(g \circ f)(b) = g(f(b)) = g(x) = s$$

$$(g \circ f)(c) = g(f(c)) = g(z) = y$$

