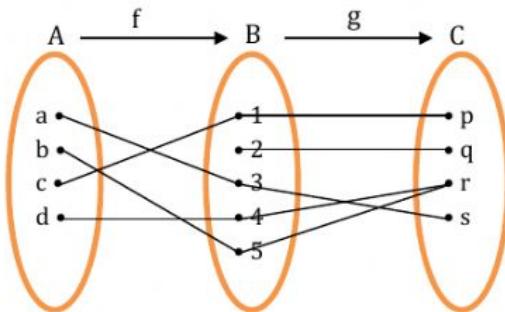




**LATIHAN MATEMATIKA**  
**FUNGSI KOMPOSISSI ( Pertemuan 2)**

Lengkapilah kotak kosong dibawah ini dengan benar.

1. Fungsi  $f: A \rightarrow B$  dan fungsi  $g: B \rightarrow C$  ditunjukkan oleh gambar di bawah ini!



Tentukanlah :

- a)  $(g \circ f)(a) = g(f(a)) = g(\boxed{\quad}) = \boxed{\quad}$   
 b)  $(g \circ f)(b) = g(f(b)) = g(\boxed{\quad}) = \boxed{\quad}$   
 c)  $(g \circ f)(c) = g(f(c)) = g(\boxed{\quad}) = \boxed{\quad}$   
 d)  $(g \circ f)(d) = g(f(d)) = g(\boxed{\quad}) = \boxed{\quad}$

2. Diketahui himpunan  $A = \{a, b, c, d, e\}$ . Fungsi  $f$  dan  $g$  pada  $A$  didefinisikan sebagai berikut

$$f = \{(a,d), (b,c), (c,a), (d,e), (e,b)\}$$

$$g = \{(a,b), (b,d), (c,e), (d,a), (e,c)\}$$

Tentukanlah fungsi komposisi:

- a)  $(g \circ f)(a) = g(f(a)) = g(\boxed{\quad}) = \boxed{\quad}$   
 b)  $(g \circ f)(d) = g(f(d)) = g(\boxed{\quad}) = \boxed{\quad}$   
 c)  $(f \circ g)(a) = f(g(a)) = f(\boxed{\quad}) = \boxed{\quad}$   
 d)  $(f \circ g)(e) = f(g(e)) = f(\boxed{\quad}) = \boxed{\quad}$



3. Diketahui fungsi  $f: R \rightarrow R$  dan fungsi  $g: R \rightarrow R$  dengan  $f(x) = 3x - 2$  dan  $g(x) = x^2 - 2x + 5$ .

Tentukanlah :

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

$$\begin{aligned} &= f(x^2 - 2x + 5) \\ &= 3(x^2 - \boxed{\phantom{0}} + 5) - 2 \\ &= \boxed{\phantom{0}} - \boxed{\phantom{0}} + \boxed{\phantom{0}} - 2 \\ &= \boxed{\phantom{0}} - \boxed{\phantom{0}} + \boxed{\phantom{0}} \end{aligned}$$

b.  $(g \circ f)(3) = g(f(3))$

$$\begin{aligned} &= g(3 \boxed{\phantom{0}} - 2) \\ &= g(\boxed{\phantom{0}}) \\ &= (\boxed{\phantom{0}})^2 - 2\boxed{\phantom{0}} + 5 \\ &= \boxed{\phantom{0}} - \boxed{\phantom{0}} + 5 \\ &= \boxed{\phantom{0}} \end{aligned}$$

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