




**Composition of Functions**

 Using  $f(x) = x + 6$  and  $g(x) = 3x$ , find:

1)  $f(g(1)) = \underline{\hspace{2cm}}$


4)  $g(f(4)) = \underline{\hspace{2cm}}$

2)  $f(g(-1)) = \underline{\hspace{2cm}}$

5)  $f(g(2)) = \underline{\hspace{2cm}}$

3)  $g(f(-3)) = \underline{\hspace{2cm}}$

6)  $g(f(3)) = \underline{\hspace{2cm}}$

 Using  $f(x) = 2x + 5$  and  $g(x) = x - 2$ , find:

7)  $g(f(2)) = \underline{\hspace{2cm}}$


10)  $f(f(4)) = \underline{\hspace{2cm}}$

8)  $g(f(-2)) = \underline{\hspace{2cm}}$

11)  $g(f(3)) = \underline{\hspace{2cm}}$

9)  $f(g(5)) = \underline{\hspace{2cm}}$

12)  $g(f(-3)) = \underline{\hspace{2cm}}$

 Using  $f(x) = 4x - 2$  and  $g(x) = x - 5$ , find:

13)  $g(f(-2)) = \underline{\hspace{2cm}}$


16)  $f(f(3)) = \underline{\hspace{2cm}}$

14)  $f(f(4)) = \underline{\hspace{2cm}}$

17)  $g(f(-3)) = \underline{\hspace{2cm}}$

15)  $f(g(5)) = \underline{\hspace{2cm}}$

18)  $g(g(6)) = \underline{\hspace{2cm}}$

 Using  $f(x) = 6x + 2$  and  $g(x) = 2x - 3$ , find:

19)  $f(g(-3)) = \underline{\hspace{2cm}}$

21)  $f(g(4)) = \underline{\hspace{2cm}}$

20)  $g(f(5)) = \underline{\hspace{2cm}}$

22)  $f(f(3)) = \underline{\hspace{2cm}}$