

**Al Moattasem International School**

**Jubail**

**Level 9 – Revision Work Sheet - 5**

**Chapter 8**

**Topic - Composite Functions & Inverse Functions**

1) For the given:-

Find the inverse of the function  $h : x \mapsto \frac{4x - 3}{2}$ .

2) For the following questions:-

Find the inverse of each of the following functions

(a)  $f(x) = 3x + 4$

(b)  $f : x \mapsto 4(x - 1)$

(c)  $f(x) = 3(2x + 5)$

(d)  $g : x \mapsto -8x + 3$

(e)  $g(x) = \frac{1}{2}(3x + 4) + 6$

(f)  $g : x \mapsto \frac{2x + 1}{3}$

3) Given the following

For each of the following functions,  $f, g$ , write down the function  $fg$ .

(a)  $f(x) = 2x + 1, g(x) = x - 3$  (b)  $f : x \mapsto 2x - 1, g : x \mapsto x^2$

(c)  $f(x) = x^2, g(x) = 2x - 1$