Topic: Composition of Functions - Worksheet 1

Using f(x) = 4x + 3 and g(x) = x - 2, find:

- 1. f(g(5))
- 2· g(f(-6))
- $4\cdot g(f(x))$

Using $f(x) = 6x^2$ and g(x) = 14x + 4 find:

- $5\cdot \qquad \qquad (f\circ g)(x)$
- $6\cdot \qquad \qquad (g\circ f)(x)$
- 7. Are these two answers the same? What does this information tell you about composition?

The notation [x] means the greatest integer not exceeding the value of x. Given f(x) = [x], g(x) = 12x and h(x) = 6/x find:

- **8**· (fo g) (5)
- 9· (fo h) (x)
- 10· (h ° f) (3)