

(Review last day)

Tue 20 Nov 2018

Exercise

$$f(x) = 6x - 3$$

write

$$a) f(2m) = 6(2m) - 3 = 12m - 3$$

$$\begin{aligned} b) f(x+1) &= 6(x+1) - 3 \\ &= 6x + 6 - 3 \\ &= 6x + 3 \end{aligned}$$

$$\begin{aligned} c) \boxed{g(x) = f(3x-1)} &= \\ &= 6 \cdot (3x-1) - 3 = \\ &= 18x - 6 - 3 = \boxed{18x - 9} \end{aligned}$$

$$\begin{aligned} d) \boxed{h(t) = 7 \cdot f(3t+2) - 5} &= \\ &= 7 \cdot [6(3t+2) - 3] - 5 = \\ &= 7 \cdot [18t + 9] - 5 = \boxed{126t + 58} \end{aligned}$$

Exercise 2

$$\underline{f(x) = x^2}$$

a) $g(x) = f(2x) - 3 =$

$$= (2x)^2 - 3 =$$

$$= 4x^2 - 3$$

b) $h(x) = 5f(x-1) - 1 =$

$$= 5[(x-1)^2] - 1$$

$$= 5(x-1)^2 - 1$$

Reminder:

x	y	1st Diff	2nd Diff
1	3	2	0
2	5	2	0
3	7	2	0
4	9	2	0