

Exercise 74

For the following exercises, evaluate the expressions, given functions f , g , and h :

- $f(x) = 3x - 2$
- $g(x) = 5 - x^2$
- $h(x) = -2x^2 + 3x - 1$

$$3f(1) - 4g(-2)$$

Solution

Evaluate the functions at the give values of x .

$$f(1) = 3(1) - 2 = 3 - 2 = 1$$

$$g(-2) = 5 - (-2)^2 = 5 - 4 = 1$$

Therefore,

$$\begin{aligned} 3f(1) - 4g(-2) &= 3(1) - 4(1) \\ &= 3 - 4 \\ &= -1. \end{aligned}$$