

Differentiation Practice

Take the derivative of the following functions:

$$1. \ f(x) = 6$$

$$2. \ f(x) = 6x$$

$$3. \ f(x) = 6x + 6x$$

$$4. \ f(x) = x^6$$

$$5. \ f(x) = x^{-6}$$

$$6. \ f(x) = -x^{-6}$$

$$7. \ f(x) = -x^6$$

$$8. \ f(x) = -x^{\frac{1}{6}}$$

$$9. \ f(x) = 6x^6$$

$$10. \ f(x) = \frac{x^6}{6}$$

$$11. \ f(x) = x^3 + 2x^{-3} - 3x^{-4}$$

$$12. \ f(x) = \frac{x^2 - 4 + 3x}{\sqrt{x}}$$

$$13. \ f(x) = x^\pi$$