Chapter one

The First Chapter

Exercise 1  Compute the derivative of the following function:

\[ f(x) = \sin((\sin x)^2) \]

The solution of this exercise is on page 4.

Exercise 2  Compute the derivative of the following function:

\[ f(x) = \sin((\sin x)^2) \]

The solution of this exercise is on page 4.
Chapter two

The Second Chapter

Exercise 3  Compute the derivative of the following function:

\[ f(x) = (x^2 + 1)\sqrt[4]{x^4 + 1} \]

The solution of this exercise is on page 4.
2.1 Solutions of the Exercises

Solutions to the Exercises of Chapter two

Solution 1  The derivative is:
\[ f(x) = (\sin((\sin x)^2))' = \cos((\sin x)^2) \cdot 2 \sin x \cos x \]

Exercise 1 is on page 1.

Solution 2  The derivative is:
\[ f(x) = (\sin((\sin x)^2))' = \cos((\sin x)^2) \cdot 2 \sin x \cos x \]

Exercise 2 is on page 1.

Solution 3  The derivative is:
\[ f(x) = (x^2 + 1)\sqrt{x^4 + 1}' = 2x\sqrt{x^4 + 1} + \frac{2x^3(x^2 + 1)}{\sqrt{x^4 + 1}} \]

Exercise 3 is on page 3.