

## Answer on Question #47148 – Math - Differential Calculus | Equations

Differentiate with respect to  $x$ :  $f(x) = (x + x^5)$

$$1 - 5x^2$$

$$1 + 5x^4$$

$$5x^4 - 1$$

$$x - 5x^4$$

### Solution:

We have if

$$f(x) = a * x^n$$

then

$$f'(x) = n * a * x^{n-1}.$$

So we have

$$f(x) = x + x^5$$

Hence

$$f'(x) = 1 + 5 * x^4.$$

**Answer:**  $1 + 5x^4$ .