## Video Set Introduction

```
nameCheck = function(a,b) {

return a.toLowerCase() != b.toLowerCase();

};
```

Before watching the videos, think about and answer these questions to the best of your ability. Your answer will always be recorded as correct, regardless of your answer choice.

For each of the following functions, compute its derivative. To enter the number  $\pi$ , type "pi."

**Problem 1** 
$$f(x) = 2x^3 + 7$$
,  $f'(x) = \Box$ 

**Problem 2** 
$$f(x) = \pi x^{\pi} + 2 + \sqrt[3]{x^2}, f'(x) = \Box$$

**Problem 3** 
$$f(x) = 7^x$$
,  $f'(x) = \Box$ 

Problem 4 
$$f(x) = \log_7(x), f'(x) = \square$$

Problem 5 
$$f(x) = 3^{\ln(x)}, f'(x) = \square$$

Learning outcomes: Author(s):