Post Video Questions

```
                                ──── SAGE ────
1   nameCheck = function(a,b) {
2       return a.toLowerCase() != b.toLowerCase();
3     };
4
5   isDerivative = function(a,b) {
6       return a.equals( b.derivative('x') );
7     };
8
```

Please answer each of these questions to the best of your ability. You are welcome to re-watch parts of any of the video to help you.

Problem 1 $f(x) = 4e^{3x}$, $f'(x) = \boxed{?}$

Problem 2 $f(x) = \sin(x^2)$, $f'(x) = \boxed{?}$

Problem 3 $f(x) = \sqrt{5 + x^7}$, $f'(x) = \boxed{?}$

Learning outcomes:
Author(s):