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 videos to help you.

For each of the following functions, find the derivative function. To enter the number π, type "pi."

Problem 1 $f(x) = -2x^{-3} + 7$, $f'(x) = \boxed{?}$

Problem 2 $f(x) = -13x^{\pi} + 2 + \sqrt[4]{x^3}$, $f'(x) = \boxed{?}$

Problem 3 $f(x) = 2^x$, $f'(x) = \boxed{?}$

Problem 4 $f(x) = \log_e(x)$, $f'(x) = \boxed{?}$

Problem 5 $f(x) = \log_{10}(x)$, $f'(x) = \boxed{?}$

Problem 6 $f(x) = e^{2\ln(x)}$, $f'(x) = \boxed{?}$

Learning outcomes:
Author(s):