1. At what value(s) of $x$ on the curve $y = a + 10b^2x^3 - 3x^5$, $a, b > 0$, does the tangent line have the largest slope?

2. Find the limit. Use L’Hopital’s Rule if appropriate.

$$\lim_{x \to 1} \frac{\log(x)}{2 \sin(2\pi x)}$$
1. At what value(s) of $x$ on the curve $y = b + 10a^2x^3 - 3x^5$, $a, b > 0$, does the tangent line have the largest slope?

2. Find the limit. Use L’Hopital’s Rule if appropriate.

$$\lim_{x \to 1} \frac{\log(x)}{2 \sin(\pi x)}$$
Quiz 8
Math 180 Section 102

Workshop Section? Circle one:
Tuesday       Wednesday       Thursday       Friday in Math 104       Friday in Math 204

Answer the following questions. Work individually. No electronic devices or
notes are permitted.

1. At what value(s) of $x$ on the curve $y = c + 10dx^3 - 3x^5$, $c, d > 0$, does the tangent
   line have the largest slope?

2. Find the limit. Use L’Hopital’s Rule if appropriate.

$$\lim_{{x \to 1}} \frac{2\log(x)}{\sin(-\pi x)}$$