

Pledge:

9/6/2011
Dr. Lunsford

MATH261 Calculus I
Quiz 2

Name: _____
(30 Points Total)

Find the exact value of the following limits (i.e. not a calculator approximation) provided the limit exists.
For each limit you must neatly show at least one intermediate step for full credit. (5 points each)

1. $\lim_{t \rightarrow -1} t^3 - 1^4 t + 3$

2. $\lim_{w \rightarrow 2} \frac{2w^2 - 3w - 2}{w^3 + 2w^2 - 9w + 2}$

3. $\lim_{x \rightarrow 3} \frac{3 - x}{x^2 - 2x + 1}$

4. $\lim_{x \rightarrow 2} \frac{\frac{1}{x^2} - \frac{1}{4}}{x - 2}$
(4 points)

5. $\lim_{h \rightarrow 0} \frac{\sqrt{3+h} - \sqrt{3}}{h}$

6. If $\lim_{x \rightarrow -3} f(x) = -1$ and $\lim_{x \rightarrow -3} g(x) = 4$ then find $\lim_{x \rightarrow -3} \frac{x\sqrt{9g(x)}}{f(x)}$