

Suggested Problems for Wednesday, September 5

Evaluate the following limits, or indicate that they do not exist:

1. $\lim_{x \rightarrow 3} (x^3 - 10x^2 + 7x - 6)$

2. $\lim_{x \rightarrow 4} \frac{1}{x - 4}$

3. $\lim_{x \rightarrow 2} \frac{x^2 - x - 2}{x^2 + x - 6}$

If f is defined on every $x \neq 3$ by the expression $f(x) = \frac{x - 3}{x^3 - 27}$, find the value necessary to assign to $f(3)$ in order to make f continuous there.

For additional practice with limits, look at problems 1–26 in Section 1.5.

For additional practice with continuity, look at problems 15–40 in Section 1.6.