Practice Problems

1. Find
$$\lim_{x \to -3} \frac{x^2 - 2x - 15}{x + 3}$$

The answer is - 8.

2. Find
$$\lim_{x \to \infty} \frac{x^5 + x^2 + 4}{x^3}$$

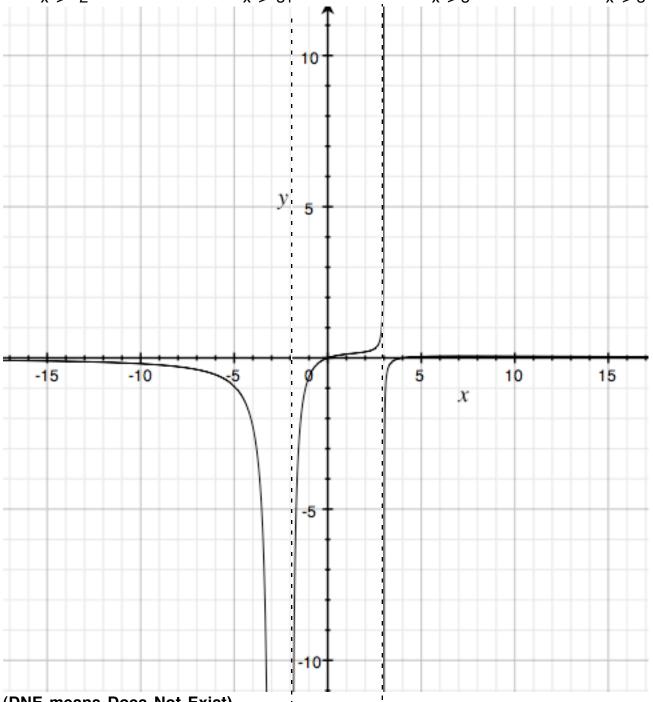
The answer is ∞.

3. Use the graph below to find the following limits.

a)
$$\lim_{x \to -2} f(x) = -\infty$$

b) $\lim_{x \to 3+} f(x) = -\infty$

c) $\lim_{x\to 3^-} f(x) = \infty$ d) $\lim_{x\to 3} f(x)$ $x\to 3$ **D. N. E.**



(DNE means Does Not Exist)