<u>Practice Problems</u>

1. Find $\lim\limits_{x \to 0} \dfrac{x-3}{x}$

The limit is -∞ as we approach from the positive side and ∞ as we approach from the negative side.

2. Find $\lim\limits_{x \to 0} \dfrac{x^2 + 6x}{x}$

The limit is 6.

3. Find $\lim\limits_{x \to 0} \dfrac{x^2}{x} - x^2$

The limit is 0.

4. Find $\lim\limits_{x \to \infty} \dfrac{x^2}{x} - x^2$

The limit is -∞.