

### Take Home Problem

Consider the following function then compute the limits:  $f(x) = \frac{x+\sqrt{3}}{9-x^2}$

$$\lim_{x \rightarrow 3^+} f(x) =$$

$$\lim_{x \rightarrow 3^-} f(x) =$$

$$\lim_{x \rightarrow 3} f(x) =$$

$$\lim_{x \rightarrow \infty} f(x) =$$

$$\lim_{x \rightarrow -\infty} f(x) =$$