Pre-class Questions: Section 1.5

1. Use limits to give a definition for a horizontal asymptote and a vertical asymptote.
2. Why does $\lim_{x \to 0} \frac{1}{x} \neq \infty$ but $\lim_{x \to 0} \frac{1}{x^2} = \infty$?
3. Why do you think the book (and I) are so insistent that a limit that "goes to infinity" still "does not exist"?
4. What questions do you still have about limits involving infinity?