Quiz, January 24

1. Determine the vector projection of the vector $3\vec{i} + \vec{j}$ onto the vector $\vec{i} + 2\vec{j}$.

2. Compute the value of
$$\lim_{x \to -3} \frac{x^2 + 3x}{x^2 - x - 12}$$
.

3. In the graph below, which of the values $\lim_{x\to 0} f(x)$ and $\lim_{x\to 2^+} f(x)$ and $\lim_{x\to\infty} f(x)$ is the largest?

