

Quiz 5 — MA161 — September 12, 2018

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1. For this problem, $f(x) = \frac{3x^2 + x - 1}{x^2 + x - 6}$.
 - (a) (4 points) How many vertical asymptotes does $f(x)$ have?
 - (b) (4 points) How many horizontal asymptotes does $f(x)$ have?
2. (12 points) Evaluate the limit, if it exists.

$$\lim_{x \rightarrow \infty} \sqrt{4x^2 + 3x} - 2x$$