

| Student ID |  |  |
|------------|--|--|
|            |  |  |

Last Name: \_\_\_\_\_

First Name: \_\_\_\_\_

Show all your work.  
If necessary, use extra sheets.

When appropriate,  
**BOX** your final answer.

MA1  
Homework

# 5

1.  $\lim_{t \rightarrow -2} \frac{t^3 + 8}{t + 2} =$

2.  $\lim_{x \rightarrow 2} \frac{x^2 - 4x + 4}{x^2 + x - 6} =$

3.  $\lim_{t \rightarrow 1} \frac{t^3 + t^2 - 5t + 3}{t^3 - 3t + 2} =$

4.  $\lim_{x \rightarrow \infty} \frac{1}{x - 12} =$

5.  $\lim_{x \rightarrow \infty} \frac{5x^2 + 7}{3x^2 - x} =$

6.  $\lim_{s \rightarrow \infty} \sqrt[3]{\frac{3s^7 - 4s^5}{2s^7 + 1}} =$

$$7. \lim_{x \rightarrow \infty} \frac{\sqrt{5x^2 - 2}}{x + 3} =$$

$$8. \lim_{y \rightarrow \infty} \frac{2 - y}{\sqrt{7 + 6y^2}} =$$

$$9. \lim_{x \rightarrow \infty} \frac{\sqrt{3x^4 + x}}{x^2 - 8} =$$

$$10. \lim_{x \rightarrow 3^-} \frac{x}{x - 3} =$$

$$11. \lim_{x \rightarrow 2^+} \frac{x}{x^2 - 4} =$$

$$12. \lim_{x \rightarrow 2} \frac{x}{x^2 - 4} =$$