

| Student ID | | |
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| | | |

Last Name: _____

First Name: _____

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

When appropriate,
BOX your final answer.

MA1
Homework

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| 1. $\lim_{x \rightarrow 1} (3x - 1) =$ | 2. $\lim_{x \rightarrow 5} x^2 =$ |
| 3. $\lim_{x \rightarrow 0} x^2 - 2x + 1 =$ | 4. $\lim_{x \rightarrow 1} (x + 3)^2 =$ |
| 5. $\lim_{t \rightarrow 2} \frac{t + 3}{t + 2} =$ | 6. $\lim_{x \rightarrow 5} \frac{x^2 - 25}{x - 5} =$ |
| 7. $\lim_{x \rightarrow 5} \frac{x^2 - 25}{x + 5} =$ | 8. $\lim_{x \rightarrow 4} \frac{x - 4}{x^2 - 5x + 4} =$ |
| 9. $\lim_{t \rightarrow 1} \frac{t^2 - 3t + 2}{t^2 - 1} =$ | 10. $\lim_{x \rightarrow 1} \frac{x^2 + x - 2}{x^2 - 1} =$ |
| 11. $\lim_{x \rightarrow b} \frac{x^2 - b^2}{x - b} =$ | |

$$12. \lim_{x \rightarrow 2} \frac{\frac{1}{x} - \frac{1}{2}}{x - 2} =$$

$$13. \lim_{x \rightarrow -2} \frac{x^3 + 8}{x^4 - 16} =$$

$$14. \lim_{x \rightarrow 2} \frac{x^2 - 4x + 4}{x^2 + x - 6} =$$

$$15. \lim_{x \rightarrow 4} \frac{x^3 - 64}{x^3 - x^2 - 11x - 4} =$$