Calculus I	**Name:** _____
Study Guide 18	**Class:** _____
Due Date: _____	**Score:** _____

No Work ⇔ No Points

Use Pencil Only ⇔ Be Neat & Organized

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1. (2 points) Evaluate $\lim_{x\to\infty} \dfrac{3-\dfrac{2}{x}}{4+\dfrac{1}{x}}$

1. _____

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2. (3 points) Evaluate $\lim_{x\to\infty} \dfrac{3x-2}{4x+1}$

2. _____

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3. (3 points) Evaluate $\lim_{x\to-\infty} \dfrac{5x+8}{8x+5}$

3. _____

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4. (3 points) Evaluate $\lim_{x\to\infty} \dfrac{1-\dfrac{3}{x^2}}{4+\dfrac{1}{x}-\dfrac{3}{x^2}}$

4. _____

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5. (4 points) Evaluate $\lim_{x\to\infty} \dfrac{x^2-3}{4x^2+x-3}$

5. _____

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6. (4 points) Evaluate $\lim_{x\to-\infty} \dfrac{2x^2-3x+8}{-4x^2+6x-8}$

6. _____

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7. (3 points) Evaluate $\lim_{x\to\infty} \dfrac{5}{4x+5}$

7. _____

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8. (3 points) Evaluate $\lim_{x\to\infty} \dfrac{x}{\sqrt{x^2+4}}$

8. _____

9. (4 points) Evaluate $\lim_{x\to-\infty} \dfrac{x}{\sqrt{x^2+4}}$

9. _____

10. (4 points) Evaluate $\lim_{x\to\infty} \dfrac{2x-3}{\sqrt{4x^2+9}}$

10. _____

11. (4 points) Evaluate $\lim_{x\to-\infty} \dfrac{2x-3}{\sqrt{4x^2+9}}$

11. _____

12. (5 points) Evaluate $\lim_{x\to\infty}\left(\sqrt{x^2+4}-x\right)$

12. _____

13. (5 points) Evaluate $\lim_{x\to\infty}\left(\sqrt{x^2+4x}-x\right)$

13. _____

14. (3 points) Evaluate $\lim_{x\to\infty}\dfrac{\sin\dfrac{1}{x}}{\dfrac{1}{x}}$

14. _____