Name : _____ Score : _____

Teacher : _____ Date : _____

Essential Discontinuities

Evaluate each limit. Round to two decimals if necessary.

1) $\lim_{x \to -4} \frac{-3}{x + 4}$

2) $\lim_{x \to 1} \frac{-10}{x - 1}$

3) $\lim_{x \to 1} \frac{x^2 - 9x + 20}{x^3 - 5x^2 - x + 5}$

4) $\lim_{x \to 4\pi} 3\tan(\frac{x}{4} - \frac{\pi}{2})$

5) $\lim_{x \to -3} \frac{x^2 + 4x}{x^3 + 11x^2 + 39x + 45}$

6) $\lim_{x \to 0} 6\cot(\frac{x}{4})$

7) $\lim_{x \to -3} \frac{x^2 + 2x - 15}{x^3 + 6x^2 - x - 30}$

8) $\lim_{x \to -2} \frac{x^2 - 9}{x^3 + 7x^2 + 16x + 12}$

9) $\lim_{x \to -\frac{\pi}{3}} \sec(\frac{3}{2}x)$

10) $\lim_{x \to -1} \frac{1}{x + 1}$

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Evaluate each limit. Round to two decimals if necessary.

1) $\lim_{x \to -4} \frac{-3}{x + 4}$

Does not exist

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Does not exist

3) $\lim_{x \to 1} \frac{x^2 - 9x + 20}{x^3 - 5x^2 - x + 5}$

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$-\infty$

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Does not exist

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