(In)determinate Forms Activity

This activity is about evaluating limits that approach the indeterminate form $\frac{0}{0}$ *algebraically.*

Directions: This worksheet is to be used in conjunction with the Gradarius Assignment titled "Section 5 Activity". Use Gradarius to help you determine which algebraic steps are allowed and correct. Once you have the solution, write it out on this paper. I will be conducting a group participation quiz during this activity. It will account for 4 of the 20 points. I will collect one paper from each group. Whose paper will be determined randomly.

1 Evaluate $\lim_{x\to 4} \dfrac{x^2-3x-4}{x^2-16}$ (4 points)

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

3 Evaluate $\lim_{x \to 7} \dfrac{\sqrt{x-3}-2}{x-7}$ (4 points)

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