

Name: \_\_\_\_\_ Score: \_\_\_\_\_

1. Evaluate the indicated limit, if it exists

$$\lim_{x \rightarrow 1} \frac{x^3 - 1}{x^2 + 2x - 3}$$

2. Explain why the function  $f(x) = \frac{x}{x-1}$  is discontinuous at point  $x = 1$  by indicating which of the three conditions in Definition 4.1<sup>1</sup> are not met.

—— **Good luck!** ——

---

<sup>1</sup>A function  $f$  is continuous at  $x = a$  when (...)