1. (4 pts.) Suppose that a farmer wishes to fence off a rectangular garden of area 150 square feet. Express the total length of fencing used (in feet) as a function of the length of one of the sides of the garden.

2. (3 pts. each) Compute each of the following limits.

(a) \( \lim_{x \to 3} x^2 - x + 1 \).

(b) \( \lim_{x \to 2} \frac{x^2 - 4}{x - 2} \).