

Name: \_\_\_\_\_ Section: \_\_\_\_\_

**Problem 1.** Graph the following piecewise function:

$$f(x) = \begin{cases} 2x + 3 & : x < -1 \\ 3 - x & : x \geq -1 \end{cases}$$

**Problem 2.** Find the domain of the following function. Give your answer in interval notation.

$$g(x) = \frac{\sqrt{x+2}}{3-x}$$