

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

**Problem 1.** Let  $f(x) = \frac{2}{x}$  and  $g(x) = \sqrt{x^2 - 9}$ .

Part 1 (2) Find  $f + g$  and its domain.

Part 2 (3) Find  $fg$  and its domain.

Part 3 (5) Find  $f \circ g$  and its domain.