

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## 17.1 – Adding & Subtracting Functions

1. Let  $f(x) = 2x - 2$  and  $g(x) = x - 3$ .

a.  $(f + g)(x) =$

b.  $(f - g)(x) =$

2. Let  $f(x) = 3x - 2$  and  $g(x) = 2x + 4$ .

a.  $(g + f)(x) =$

b.  $(g - f)(x) =$

3. Let  $f(x) = 3x + 4$  and  $g(x) = 3x$ .

a.  $(f + g)(x) =$

b.  $(f - g)(x) =$

4. Let  $f(x) = x^2 + x$  and  $g(x) = x + 4$ .

a.  $(g + f)(x) =$

b.  $(g - f)(x) =$

5. Let  $f(x) = 4x - 5$  and  $g(x) = 2x - 5$ .

a.  $(f + g)(x) =$

b.  $(f - g)(x) =$

6. Let  $f(x) = x^2 + 4$  and  $g(x) = 4x + 1$ .

a.  $(g + f)(x) =$

b.  $(g - f)(x) =$

7. Let  $f(x) = x^3 + 5x^2$  and  $g(x) = 2x + 5$ .

a.  $(f + g)(x) =$

b.  $(f - g)(x) =$

8. Let  $f(x) = x^2 - 3x$  and  $g(x) = 4x + 5$ .

a.  $(g + f)(x) =$

b.  $(g - f)(x) =$