

Name _____



Date _____

Relations and Functions

Complete.

1. $f(x) = 14x + 11$ $g(x) = 11x^3 - 11x^2 - 15x - 10$ find $g(11) \times g(-12) - g(-6) \times f(3)$	2. $f(x) = 13x - 12$ $g(x) = -10x + 12$ find $f(f(4))$	3. $f(x) = 13x + 15$ $g(x) = -13x^2 + 14x + 13$ find $f(13) \div g(13)$
4. $f(x) = 15x^2 + 11x - 13$ $g(x) = -11x^2 - 15x + 13$ find $g(f(5))$	5. $f(x) = 14x^3 - 13x^2 + 15x - 10$ $g(x) = 11x^2 - 14x - 13$ find $f(14) - g(14)$	6. $f(x) = -14x - 10$ $g(x) = -11x^3 - 13x^2 + 13x + 13$ find $g(7) \times g(-2) + g(-3) \times f(-5)$
7. $f(x) = 12x + 10$ $g(x) = -10x + 12$ find $f(17) \div g(17)$	8. $f(x) = 14x + 13$ $g(x) = -15x^3 + 13x^2 - 11x + 14$ find $f(f(4))$	9. $f(x) = -12x - 14$ $g(x) = 15x - 15$ find $g(f(9))$
10. $f(x) = -15x + 11$ $g(x) = -12x^2 + 13x + 10$ find $f(7) - g(7)$	11. $f(x) = -12x^3 + 13x^2 + 15x + 11$ $g(x) = 12x^2 + 14x - 10$ find $g(g(5))$	12. $f(x) = 13x^2 + 10x - 14$ $g(x) = -12x^3 - 10x^2 - 15x + 15$ find $f(-5) \times f(-4) - g(-6) \times f(-5)$
13. $f(x) = -11x^2 - 15x - 14$ $g(x) = 13x^2 - 15x + 14$ find $g(-3) \times g(11) + g(8) \times f(2)$	14. $f(x) = -15x^2 + 13x - 11$ $g(x) = 13x^3 - 10x^2 + 12x + 11$ find $f(-10) \times g(-8) + f(-7) \times f(-7)$	15. $f(x) = 14x - 12$ $g(x) = 14x - 10$ find $f(19) - g(19)$

Enter answers in text boxes.