

Name: _____
PC: Decomposition Homework 2

Date: _____
Ms. Loughran

Find functions f and g such that $h(x) = (f \circ g)(x)$.

| | |
|---------------------------|-----------------------------|
| 1. $h(x) = (3x^2 - 2)^4$ | 2. $h(x) = (x^2 - x + 1)^8$ |
| 3. $h(x) = \sqrt[3]{x-4}$ | 4. $h(x) = \frac{1}{x+2}$ |
| 5. $h(x) = \sqrt{x^2+6}$ | 6. $h(x) = 2^{6x+7}$ |
| 7. $h(x) = \sqrt[4]{x+1}$ | 8. $h(x) = (5x-8)^6$ |

Express the function in the form $(f \circ g \circ h)(x)$

9. $F(x) = \sqrt[3]{(x+4)^2}$

10. $F(x) = (5x-8)^6$