Name: _____   Date: _____
PCH: Decomposition   Ms. Loughran

Do Now:

For each function h given below, decompose h into the composition of two functions f and g so that $h = f \circ g$ in **two** different ways.

1. $h(x) = (x+5)^2$

2. $h(x) = \sqrt[3]{5x^2 + 1}$

3. $h(x) = 2^{\cos x}$

4. $h(x) = \cos(2^x)$

5. $h(x) = \dfrac{\sqrt{x^2+1} - 1}{\sqrt{x^2+1} + 1}$