Name: _____   Date: _____

PC: Decomposition of Functions   Ms. Loughran

Do Now:

1.

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

(a) $h(x) = (x+5)^2$

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

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

(d) $h(x) = \cos(2^x)$

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