

NAME: _____ Score _____/10

Please **print** your name**SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION**

1. What is the area of a trapezoid with height 3 and bases 4 and 5? _____.
2. What is the rule for the function $f \circ g$ if $f(x) = \log(x)$ and $g(x) = 3x^2 - 4x + 9$?
3. Find two simpler functions f and g so that the function h whose rule is $h(x) = (2x^3 + x - 4)^3$ may be written as the composition $f \circ g$ of the simpler functions.
4. Find two simpler functions f and g so that the function h whose rule is $h(x) = \ln\left(\frac{2x}{x^2 - 5}\right)$ may be written as the composition $f \circ g$ of the simpler functions.