

NAME: _____ Score _____/10

SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION

1. Write in complete detail a verbal description of the exact meaning of the symbol $hm\left(\frac{\sqrt{x}+2}{3}\right)$ for the function named hm.
2. The rule for the function f is $f(x) = x^2 + x + 1$. Find the zeros of f.
3. The rule for the function f is $f(x) = x + 2$. The rule for the function h is $h(x) = x^2 + 1$. What is the rule for the composition $h \circ f$. Show your work. Your work should be a string of equalities beginning with $h \circ f(x) =$