

(9.) (14 points) Suppose you decide to weave baskets and sell them for a living. Let $b = f(t)$ be the number of baskets you can weave in t hours, and let $d = g(b)$ be the number of dollars you can get for b baskets.

(a) Let $h(t) = g(f(t))$. Describe the function h in words.

(b) What are the units of $h'(t)$?

(c) Describe $f^{-1}(10)$ in words.

(d) What are the units of $(f^{-1})'(b)$?

(e) With any luck, you'll get better at basket-weaving as time passes – it will take you less time to weave each basket. State this in terms of the concavity of f . Explain your reasoning.