12. [8 points] "*Timely Time*" is a local company that builds and sells clocks and watches. Let $C(q)$ be the cost (in dollars) for *Timely Time* to produce q wall clocks

a. [2 points] Write an equation that expresses the statement

"The cost of producing k clocks is m dollars."

Answer: _____

b. [2 points] Write an equation that expresses the fact that doubling the quantity of clocks produced increases *Timely Time's* production costs by 80%.

Answer: _____

Let $w(d)$ be the number of watches that can be produced by *Timely Time* for a cost of d dollars. Assume that w is an invertible function.

c. [2 points] Express the total cost for *Timely Time* to produce 15 clocks and 7 watches in terms of C and w.

Answer: _____

d. [2 points] Suppose that $w(C(q)) > q$ for all values of q in the domain of $w(C(q))$. Give a practical interpretation of the inequality $w(C(q)) > q$ in the context of this problem.