1. [8 points]
   a. [3 points] Em, an employee at the Math-tas-tique Dog Boutique, earns $750 per week in salary and earns an additional 5% of her total sales that week (her commission). Write a formula for $M(x)$, the amount, in dollars, Em will earn in a week in which she is responsible for $x$ in sales.

   \[ M(x) = \] \\

   b. [3 points] Compute the value of $M^{-1}(1000)$ and describe its meaning in the context of the problem.

   Show all work. Give your final answer in decimal form, NOT exact form.

   \[ M^{-1}(1000) = \] \\

   Meaning:

   c. [2 points] Let $R(w)$ be the function giving the dollar amount of Em’s sales in the $w$th week of 2023. Choose the best description of the meaning of $M(R(23))$ from the choices below.

   ○ A. The week in which Em makes $23 in commission.
   ○ B. The amount of commission Em makes in the 23rd week of 2023.
   ○ C. The total amount Em gets paid in 2023.
   ○ D. The total amount Em gets paid in in the 23rd week of 2023.
   ○ E. This doesn’t make sense because we cannot plug a number of weeks into the function $M$. 