

6. [11 points] Sixty liters of chlorine were accidentally spilled into a lagoon. The cost C (in millions of dollars) of removing y liters of chlorine from the water in the lagoon is given by the function

$$C(y) = \frac{y}{60 - y}.$$

- a. [2 points] What is the cost of removing 10 liters of chlorine from the lagoon? Include units.
- b. [4 points] Compute the average rate of change of C for y between 25 and 40. Include units.
- c. [3 points] How many liters of chlorine can be removed from the lagoon if you invest 3 million dollars cleaning the lagoon? Show all your work.
- d. [2 points] What is the domain of the cost function $C(y)$ in the context of this problem? Use inequalities or interval notation.

Domain=_____