Controversial entrepreneur Arnold "Mad Dog" Johnson recently visited the towns of Ann Arbor, MI, and Durham, NC. While in Ann Arbor, Mr. Johnson noticed students wearing T-shirts that said, "Harvard: The Michigan of the East." While in Durham, Mr. Johnson noticed students wearing T-shirts that said, "Harvard: The Duke of the North." Mr. Johnson plans to sell T-shirts in Cambridge, MA, that say, "Harvard: The Harvard." It costs Mr. Johnson $3 to make each T-shirt. A little market research indicates that Mr. Johnson will probably sell $480 - x^2$ T-shirts each month if he charges x for each T-shirt.

- Write a function that gives Mr. Johnson's costs per month as a function of x.

- Write a function that gives the amount of money that Mr. Johnson gets each month from T-shirt sales as a function of x.

- Write a function that gives Mr. Johnson's monthly profit as a function of x.

- How much should Mr. Johnson charge for each T-shirt?