5. (9 points) The number of socks you own decreases according to the number of loads of laundry you've done since the beginning of the school year. After your first load of laundry you have 10 pairs of socks remaining and after 20 loads you are down to your last pair of socks. Find an exponential function that models this situation, and approximate the number of pairs of socks that you had when you started the semester. Interpret your approximation into a reasonable answer, and express your answer in a sentence. [Show your work!]