Ex:

46. ***Debt refinancing*** When a debt is refinanced, sometimes the term of the loan (that is, the time it takes to repay the debt) is shortened. Suppose the current interest rate is 7%, and a couple's current debt is $100,000. The monthly payment R of the refinanced debt is a function of the term of the loan, t, in years. If we represent this function by $R = f(t)$, then the following table defines the function.

t	R	t	R
5	1980.12	15	898.83
10	1161.09	20	775.30
12	1028.39	25	706.78

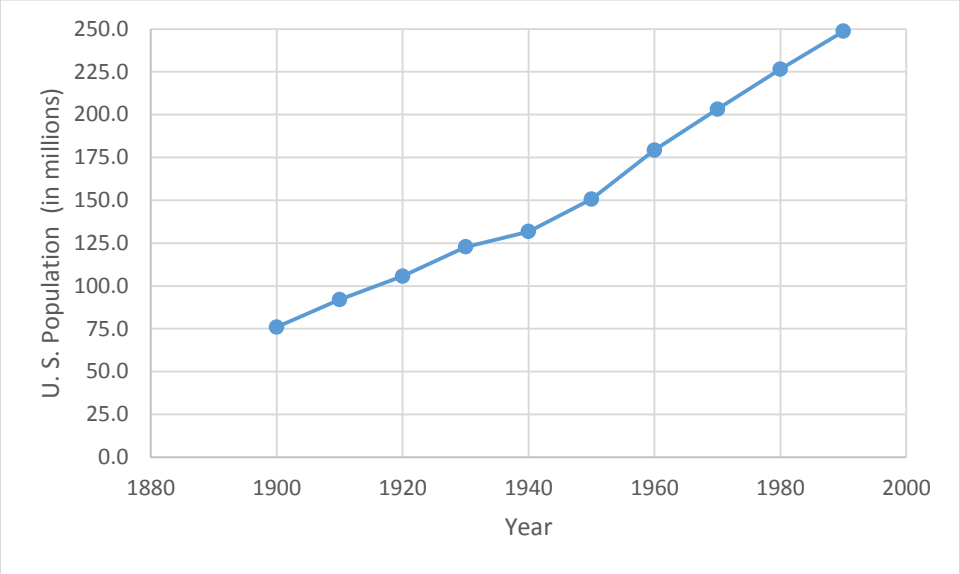
Source: Comprehensive Mortgage Payment Tables, Publication No. 492, Financial Publishing Co., Boston

(a) If they refinance for 20 years, what is the monthly payment? Write this correspondence in the form $R = f(t)$.

(b) Find $f(10)$ and write a sentence that explains its meaning.

(c) Is $f(5 + 5) = f(5) + f(5)$? Explain.

Ex:



The US Population (in millions) is given as a function f of the year from 1900-1990.

1. What is the (estimated) population in 1960?

2. Estimate f(1930) and write a sentence that explains its meaning.

3. Estimate f(1990)-f(1900) and explain its meaning.

4. Does f(1990-1900) mean the same thing as f(1990) – f(1900)?

Homework (slight change from assignment sheet): Section 1.2, p. 70: #1, 3-6(all), 7-57(odd)

Note: Class is cancelled for Monday, October 19. There will be a quiz over Sections 0.7 & 1.1 on Wednesday, October 21.