Mathematics of Personal Finance II

Ted and Sue are going to purchase a condo in Ocean City. They have selected a two-bedroom model one block from the beach that costs *$590,000.* Also because the market is flat on sales, the builder has agreed to pay all closing costs and pre-paid items at settlement. The mortgage company requires a 20% down payment which Ted and Sue have available. And they will finance the remainder of the purchase price by taking out a mortgage at 6.12% interest.

a) What is their monthly payment if they choose a 20-year loan?

b) How much total interest will they end up paying over the 20 years?

c) After exactly 12 years of owning and using this condo, Ted and Sue have decided to sell it to have cash available for their children's college education. What is the payoff on this loan after exactly 12 years of making payments?

d) Inflation in the Ocean City housing market has averaged 5% per year over the 12 years Ted and Sue have owned this condo. How much equity do they have in this condo that can now be used for college expenses?