Reminder

1. HW 13.1, 13.2, 13.4 due   04/29   — 11:59 pm

2. Exam 3 due today

3. Final Exam — Tues 05/03, 3:30pm — 5:30pm

4. Final Exam study-guide (89 quesions + answers)

13.4   The Cost & advantages of Home ownership

Approach 1: Formula
Regular Monthly Payment

$$R = \frac{P\left(\frac{r}{12}\right)}{1 - \left(\frac{12}{12+r}\right)^{12t}}$$

r = annual interest rate

t = time in years

$$R = \frac{(69500)\left(\frac{0.05}{12}\right)}{1 - \left(\frac{12}{12+0.05}\right)^{(12)(30)}} = \frac{289.58}{0.7762}$$

$$\approx 373.07$$

Approach 2: TVM Solver

Approach 3: use Tables

Amortization Schedule

Step1: Interest for the month $= \begin{pmatrix} \text{old balance} \\ \text{of principal} \end{pmatrix}\begin{pmatrix} \text{annual} \\ \text{Interest} \\ \text{rate} \end{pmatrix}\left(\frac{1}{12} \, yr\right)$

Step2: Payment on principal $=$ monthly payment $-$ Interest for the month

Step3: New Balance of Principal $=$ old balance of principal $-$ Payment on principal