

Math 101 - Final Exam Review Problems

1. a) \$1120 b) \$1126.83 c) \$1127.50

2. $FV = 50 \left[\frac{(1 + .08/12)^{480} - 1}{.08/12} \right] = 174,550.39$

3. $100,000 = \text{pymt} \left[\frac{(1 + .08/12)^{480} - 1}{.08/12} \right]$ $\leftarrow \text{pymt} = 3491.01$
 need interest at 8%

(not giving by mistake) $\text{pymt} = \frac{100,000}{3491.01} = 286.45$

4. adjustable rate - when interest rate increases, payment may be unaffordable

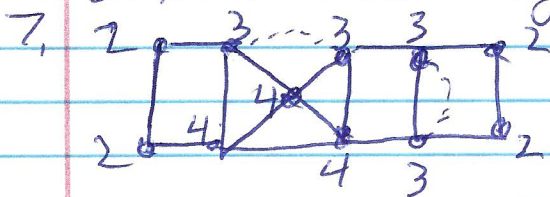
balloon payment - large payment due must be paid on time or foreclosure is risked

5. unpaid balance rate - if you don't pay in full at end of month, interest is charged at 16.9%

cash advance - if you take cash out, rather than purchasing an item, 21.9% is charged

late fee - if you don't make the minimum payment by the due date, 29.9% is charged on all balances after that date

6. If you pay in full before the due date, there is no interest charge



tuber trail? - yes

" circuit = no (not yet)

8. a) 91 = 362880

b) 10' (start at each city)

9. near neighbor $F \quad I \quad K \quad C \quad B \quad F$
 $10 \quad 8 \quad 22 \quad 37 \quad 35 = 112$

cheap link $K \quad I \quad F \quad C \quad B \quad K$
 $8 \quad 10 \quad 22 \quad 37 \quad 32 = 109 \leftarrow \text{a little shorter}$

