

HOMEWORK Questions...

6. Jake and Archie are looking for places to live.

- Jake decides to rent a house for \$1400 per month.
- Archie buys a house for \$189 900, with a down payment of 10%. The bank has offered Archie a 20-year mortgage for the remainder of the cost, at 4% compounded semi-annually, with payments every two weeks.

Jake and Archie both move after 5 years. Archie's house has depreciated by 2% per year. Compare Jake's and Archie's housing costs.

Down 0.10×189900
 Payment = 18990

Jake - Rent

1400*12*5 = \$84000
 No Asset

Archie - Buy $189900 - 18990$

N=520
 I%=4
 PV=170910
 PMT=-476.215394
 FV=0
 P/Y=26
 C/Y=2
 PMT: END BEGIN

Pay = $476.22 * 26 * 5 = 61908.6 + 18990$
 TOTAL → 80898.60
 Asset (Equity)

Buy & Sell

Ans * 0.98
 182379.96
 178732.3608
 175157.7136
 171654.5593
 $189900 * 0.98^5$
 171654.5593

Bank ← Value after 5 yrs
 me → (smiley face)

N=130
 I%=4
 PV=170910
 PMT=-476.215394
 FV=-139927.2952
 P/Y=26
 C/Y=2
 PMT: END BEGIN

owe bank

171654.56 - 139927
 = 31727.26

SOLD → Offset Cost

80898.6 - 31727.26
 = 49171.34

No Asset

Ready for the test??? REVIEW Time...

Chapter 8: Investing Money

- mid chapter review p. 481
- chp review p. 507
- chp self test p. 506

Chapter 9: Borrowing Money

- mid chapter review p. 539
- chp review p. 573
- chp self test p. 572

Cumulative Review...Chp. 8/9 p. 576

Simple Interest

$$I = Prt$$

$$A = P + I$$

$$A = P + Prt$$

$$A = P(1 + rt)$$

Compound Interest

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$I = A - P$$

Present Value

$$P = \frac{A}{\left(1 + \frac{r}{n}\right)^{nt}}$$

Rule of 72 and Rate of Return

$$\text{Doubling Time} = \frac{72}{\text{Rate}}$$

$$\text{ROR} = \frac{\$ \text{earn}}{\$ \text{invested}} \times 100\%$$

TVM-Solver

N =
 I % =
 PV =
 PMT =
 FV =
 P / Y =
 C / Y =
 PMT : END BEGIN