In Summary

Key Ideas

- When deciding whether to rent, buy (with or without financing), or lease, each situation is unique. A cost and benefit analysis should take everything into account.
  - Costs include initial costs and fees, short-term costs, long-term costs, disposable income, the cost of financing, depreciation and appreciation, penalties for breaking contracts, and equity.
  - Benefits include convenience, commitments, flexibility, and personal needs or wants, such as how often you want to buy a new car.
- Since each situation is unique, it is impossible to generalize about whether renting, leasing, or buying is best.

Need to Know

- When renting, leasing, and buying, you often need to make payments up front. Some payments go toward the overall cost, such as a down payment on a house or a lease deposit and the first and last month's rent. Other deposits, such as a rental damage deposit, are refunded at a later date.
- Appreciation and depreciation affect the value of a piece of property and should be considered when making decisions about renting, buying, or leasing, based on the particular situation. They are usually expressed as a rate per annum.
- Equity can make buying a house a form of investment.

HOMEWORK...???

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4. Kami needs a new septic bed for her home's sewage system. Since she is in the business of landscaping, she can do the job herself. Kami estimates that the job will take at least 3.5 days to complete, but she will need a backhoe. She could pay \$6000 to rent a backhoe for a week, or she could pay \$700 per half day. Which should she do? Explain.

Rent (week)

\$6000

BEST

Rent (3.5 days)

$7 \times 700 = \$4900$

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.

Jake

```
1400*12*5
                  84000
```

No equity

Archie

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

Bi-weekly Payment

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

Owe after 5 years

```
189900*0.98
                 186102
Ans*0.98
              182379.96
            178732.3608
            175157.7136
            171654.5593
```

SELL

Value after 5 years

```
171654.56-139927
.30
               31727.26
Ans-18990
               12737.26
```

Money after bank mortgage is paid

CASH

No equity

Money after paying back down payment

EXAMPLE 4 p. 563 Solving a problem that involves leasing or buying office space

Lance started his own construction business 2 years ago. His business has grown quickly, and his home office is no longer big enough. He is considering these two options:

- He could sign a 3-year lease on office space, with monthly rental payments of $2000, and a refundable damage deposit of $2000, but there is a penalty for breaking the lease.
- He could purchase a house for $285 000 and renovate so it could be used as an office. A 5% down payment would be required, and he would take out a 15-year mortgage at 5%, compounded semi-annually, with monthly payments. Assume appreciation of 2% yearly.

a) What are the costs of leasing over 15 years?
b) What are the costs of buying over 15 years?
c) What do you recommend for Lance? Justify your advice.

Lease

```
15*12*2000+2000
           362000
```

Lost
No equity

Buy * Best

Monthly Payment

```
N=180
I%=5
PV=270750
▪PMT=-2133.8452…
FV=0
P/Y=12
C/Y=2
PMT:END BEGIN
```

Paid with payments overall including down payment

```
180*2133.85
         384093
Ans+14250
         398343
```

```
    354361.6779
    361448.9115
    368677.8897
    376051.4475
    383572.4764
285000(1.02)^15
    383572.4764
```

Value of house after 15 yrs

```
383572.47-398343
        -14770.53
```

Lost No equity

HOMEWORK...

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