

# Chapter 5 BLM Answers

## BLM 5-2 Practice Using the TVM Solver to Calculate Mortgage Payments

- a) \$21 500;  $\$215\ 000 - \$21\ 500 = \$193\ 500$ ;  
\$193 500
- b)  $N = 240$ ;  $I\% = 4.85$ ; Present Value,  $PV = 193\ 500$ ;  
Future Value; number of payments;  
 $PMT = \$1255.91$
- c) Each payment is money that Jason gives up.  
1. a)  $N: 240$ ;  $I\%: 4.35$ ;  $PV: 185\ 000$ ;  
 $PMT: -1151.62$ ;  $FV: 0$ ;  $P/Y: 12$ ;  $C/Y: 2$   
b)  $N: 300$ ;  $I\%: 5.25$ ;  $PV: 385\ 000$ ;  
 $PMT: -2294.28$ ;  $FV: 0$ ;  $P/Y: 12$ ;  $C/Y: 2$   
c)  $N: 300$ ;  $I\%: 5.75$ ;  $PV: 235\ 500$ ;  
 $PMT: -1471.93$ ;  $FV: 0$ ;  $P/Y: 12$ ;  $C/Y: 2$

## BLM 5-3 Kara's Mortgage Payment Schedule

1. a) time in years  
b) amount of money, in thousands of dollars  
c) decrease in the amount owing over time
2. a) light shaded region  
b) dark shaded region  
c) amount of interest decreases over time  
d) principal increases over time
3. Answers may vary. Example: The interest represents more than half of the amount borrowed.

## BLM 5-4 Amortization Period and Interest Rate

1. Answers are in italics.

Fixed Rate Mortgage Amount	Annual Interest Rate Charged	Amortization Period	Monthly Payment
a) \$165 000	4.5%	10 years	<i>\$1706.73</i>
b) \$165 000	4.5%	15 years	<i>\$1258.73</i>
c) \$165 000	4.5%	20 years	<i>\$1040.17</i>
d) \$165 000	4.5%	25 years	<i>\$913.23</i>

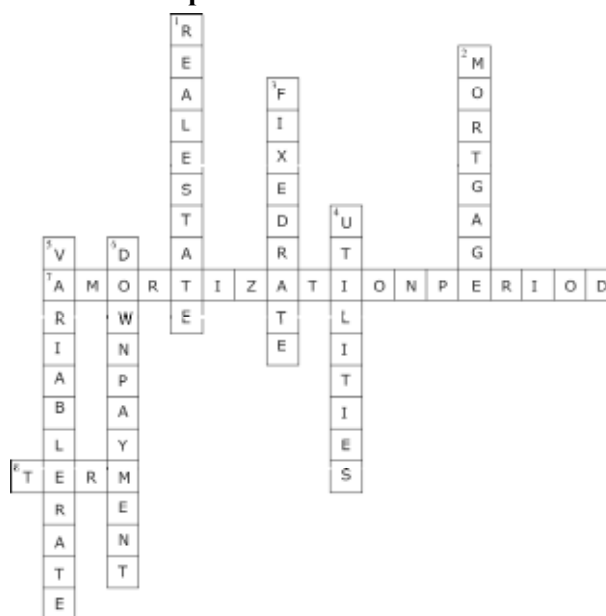
- e) Answers may vary. Example: The longer the amortization period, the lower the monthly payment. I would consider how much of a monthly payment I can afford and then choose the amortization period accordingly.
- f) Answers may vary. Example: Paying off a mortgage more quickly means making larger payments but paying less interest over all.
- g) Answers may vary. Example: Paying off a mortgage more slowly means making smaller payments but paying more interest over all.

2. Answers are in italics.

Fixed Rate Mortgage Amount	Annual Interest Rate Charged	Amortization Period	Monthly Payment
a) \$225 000	3.5%	25 years	<i>\$1123.36</i>
b) \$225 000	4.6%	25 years	<i>\$1257.85</i>
c) \$225 000	7.5%	25 years	<i>\$1646.00</i>
d) \$225 000	9.4%	25 years	<i>\$1922.36</i>

- e) Answers may vary. Example: The higher the interest rate, the greater the monthly payment. I need to consider whether I can afford larger mortgage payments if the interest rate goes up. I might choose a fixed rate mortgage so that the payments stay the same.

## BLM 5-5 Chapter 5 Word Puzzle



### Across

7. amortization period
8. term

### Down

1. real estate
2. mortgage
3. fixed rate
4. utilities
5. variable rate
6. down payment



**BLM 5-6 Chapter 5 Test**

1.
  - a) two bedrooms plus one more in the basement or on the main floor
  - b) bathroom with toilet, sink, shower, and bathtub
  - c) condominium
2. Answers will vary depending on the community. Examples are provided.
  - a) condo: 2BR, 1 bath, about 900 Sqft;  
townhouse: 2 BR, 2 bath, about 1000 Sqft
  - b) single family home 4 BR, 2 bath (4 pc and 3 pc), about 2000 Sqft
3.
  - a) \$14 775
  - b) \$280 725
  - c) \$1807.02
  - d) 240 payments
  - e)  $\$1807.02 \times 240 = \$433\,684.80$
  - f) \$152 959.80
  - g) make larger payments to shorten the amortization period or look for a lower rate of interest
4. Mike is correct. After all payments are made, the balance owing is \$0.

5. Answers may vary. Look for one advantage and one disadvantage. Example:  
Advantage: may cost less than renting accommodations  
Disadvantage: responsible for maintenance and repair
6.
  - a) \$973
  - b) \$257.50
  - c) \$969.50
7. Answers will vary. Look for two expenses. Example:
  - a) home insurance: fixed
  - b) property tax: fixed

**BLM 5-7 Chapter 5 Task**

Note that answers will depend on the home that students chose and the estimates of home expenses.

5.
  - a) The mortgage payment would increase.
6. Answers will vary. Possible answers include income, long-term savings, number of dependants, and other non-discretionary expenses (e.g., loan payments).

