

**GRADE 12 ESSENTIAL
UNIT F - HOUSE FINANCE
UNIT REVIEW**

Name: _____

Date: _____

MULTIPLE CHOICE

1. Ethan's gross monthly income is \$4,869. He has no debts. What is the maximum amount that Ethan can afford for monthly housing costs? Use the Gross Debt Service Ratio (GDSR).

A. \$1558.08 B. \$1200.00 C. \$4869.00 D. \$1947.60

2. Which costs are called housing costs when determining debt service ratios?

- A. mortgage payment + property taxes
- B. only mortgage costs
- C. mortgage payment + property taxes + heating costs
- D. mortgage payment + utility costs

3. Ingrid and Jesse want to buy a home that costs \$235 000. They need 5% of the purchase price for the minimum down payment. How much will they need for the down payment?

A. \$11 750 B. \$1175 C. \$5000 D. \$205 000

4. Which closing cost helps home buyers identify repairs they might need to make in a home they plan to buy?

- A. moving expenses
- B. home inspection
- C. lawyer's fees
- D. house insurance

5. Which closing cost will protect the buyer for property damage or theft?

- A. land transfer tax
- B. lawyer's fees
- C. home inspection
- D. house insurance

6. Hudson takes possession of his new home on Aug 1. The property tax is \$2430/yr. The vendors have already paid the property tax for the year. How much must Hudson pay for his share of the tax when the deal closes?

- A. \$1417.50 B. \$1215.00 C. \$202.50 D. \$1012.50

7. Which of these factors could affect the cost of home insurance?

- A. the location of your home
 B. the distance to the nearest fire station
 C. the age of your home
 D. all of the above

8. Riley wants to buy a house in Thompson that costs \$174 000. How much is the land transfer tax?

| Manitoba Land Transfer Tax | |
|---|-------------|
| Value of property | Rate |
| on the first \$30 000 | 0% |
| on the next \$60 000 (\$30 001 to \$90 000) | 0.5% |
| on the next \$60 000 (\$90 001 to \$150 000) | 1% |
| on the next \$50 000 (\$150 001 to \$200 000) | 1.5% |
| over \$200 000 | 2% |

- A. \$1260.00 B. \$1062.50 C. \$1650.00 D. \$10 625.00

9. The interest rate for Debbie and Mark's mortgage is 2.45%. They can choose a 20 yr or a 25 yr amortization period. How much less is the interest cost for the shorter amortization period?

- A. \$5387.55
- B. \$17 483
- C. The interest cost is the same for both amortization periods.
- D. \$196.54

| | |
|------------------------|------------------------|
| Mortgage | Mortgage |
| \$241 540 | \$241 540 |
| Amortization | Amortization |
| 20 yr | 25 yr |
| Payment period | Payment period |
| monthly | monthly |
| Interest rate | Interest rate |
| 2.45 % | 2.45 % |
| Your payment | Your payment |
| \$1274.05 per month | \$1077.51 per month |
| Interest cost | Interest cost |
| \$64 232 | \$81 715 |

10. Why might someone choose a long amortization period for a mortgage loan instead of a short one?

- A. The mortgage payments are lower.
- B. The borrower will pay less interest over the life of the loan.
- C. Banks reduce the interest rates for longer amortization periods.
- D. The loan can be paid off more quickly.

11. What changes when you increase the down payment for a mortgage loan?

- A. If the down payment is more than 10% of the purchase price, you do not need to pay mortgage default insurance.
- B. Nothing changes. The loan terms remain exactly the same.
- C. You borrow more money so your payment increases and you pay more interest over the loan period.
- D. You borrow less money so your payment decreases and you pay less interest over the loan period.

12. Sasha needs to borrow \$210 000 for a mortgage. The online calculators show interest rates from two different lenders. How much money will Sasha save in 1 yr if she chooses the lower interest rate?

- A. \$82 001.96 B. \$2.40
C. \$11305.20 D. \$3280.08

| | |
|------------------------|-----------------------|
| Mortgage | Mortgage |
| \$210 000 | \$210 000 |
| Amortization | Amortization |
| 25 yr | 25 yr |
| Payment period | Payment period |
| monthly | monthly |
| Interest rate | Interest rate |
| 4.9 % | 2.5 % |
| Your payment | Your payment |
| \$1215.44 per month | \$942.10 per month |
| Interest cost | Interest cost |
| \$154 630.50 | \$72 628.54 |

13. Which of these is a benefit of owning a home instead of renting?

- A. You do not need to pay property taxes directly.
B. It costs less for maintenance and repairs.
C. You can use the equity in your home as an asset to borrow money.
D. It is easier to move if you get a job in another location.

14. Brad and Janet's home is assessed at \$227 750.

- Their property taxes are based on 35% of the assessed value.
- The mill rate is 10.075 for municipal taxes and 13.095 for school-division taxes.

How much are the property taxes on their home?

- A. \$1309.26 B. \$79 712.50
C. \$5430.50 D. \$1846.93

15. Which statement best describes how a mortgage changes as the amortization period progresses?

- A. You repay increasing amounts of the principal each year because you have less interest to pay as the balance decreases.
- B. You pay increasing amounts of interest each year because the principal keeps increasing.
- C. Your regular payment decreases every year.
- D. Your regular payment increases every year.

OPEN Answer

1. Manny has just moved into an apartment block. How much will he have to pay per year to insure his belongings for \$65 000 per year with Comprehensive coverage and a \$200 deductible? (Tables at end)

2. The Johnson's have purchased a house with a replacement value of \$215 000. They want a Comprehensive policy and live in a town with the nearest fire station 4 kilometres away. (Area 3). Find their premium if they choose a \$500 deductible.

3. Anne takes out a mortgage of \$165 000 from the bank for 20 years at 5.5%. What is her monthly payment?

4. Al borrows \$155 000 at 6.25%. What interest will he pay in the first month?

5. Larry pays \$1037.00 per month on his mortgage. This month \$251.62 goes to equity. What will be the amount he pays towards the interest this month?

6. Stephanie inherited a cottage from her uncle. The cottage has an assessed value of \$175 000. Property taxes are based on a portioned assessment of 47.2% of the assessed value. What is the portioned assessment of Stephanie's cottage?

7. The budget requirement for Warren, Manitoba is \$2 660 000. The taxable portioned assessment of the town is \$75 000 000. What is the mill rate for Warren properties?

8. Why does it make sense to look for a home that costs less than the maximum amount you can afford?

9. What happens to the amount of interest you pay on a mortgage loan when you increase the down payment? Explain.

10. Shauna owns a house that has an assessed value of \$289 500.
- The residential property taxes are based on 45% of the assessed value.
 - The mill rate is 15.48 for municipal taxes and 12.9 for school-division taxes.

How much does Shauna pay each year for property taxes?

11. Complete the first 2 months of the following mortgage spreadsheet given that Margo purchased her home for \$215 000 and placed a \$55 000 down payment. She borrowed the rest from the bank at a rate of 4.75% for 25 years.

Selling Price: _____ Down Payment: _____
 Principal: _____ Interest Rate: _____
 Amortization Period: _____ Monthly Payment: _____

| Payment # | Due Date | Monthly Mortgage Payment | Interest Portion (month) | Principal Portion (month) | Unpaid Balance (Selling Price - Down Payment) | Owner's Equity (Principal Paid + Down Payment) |
|-----------|----------|--------------------------|--------------------------|---------------------------|---|--|
| | | | (Rate x Balance ÷ 12) | (Payment - Interest) | (Previous Balance - Principal) | (Previous Balance + Principal) |
| 1 | | | | | | |
| 2 | | | | | | |

12. Karen wants to buy a house worth \$190 000. She makes a down payment of \$25 000. Monthly property taxes are \$265 and heating costs are \$195 per month.

Calculate Karen's Gross Debt Service Ratio if her gross monthly income is \$3,200 and her bank is offering 4.75% over 20 years.

Can Karen afford this house?

13. Mr. Johnson's family has decided to buy a larger home for work purposes, and the date of possession is March 1. The price of the home is \$185 000 and he has \$50 000 as a down payment. The following additional costs are related to the purchase of the home:

The Johnson's decide to have an inspection done on the home to ensure that there are not any issues with the structure of the building. The inspection fee is \$400.00. The bank charges \$150.00 for the mortgage application fee. The new home is appraised, and the fee is \$250.

The bank requires a land survey which costs \$550.

The legal fees are \$575. The land transfer tax is calculated using the chart below.

The interest adjustment that the Johnson's must pay is \$498.03. The Johnson's will buy homeowner's insurance on the new home for \$859, but will receive a refund of \$500 from the previous home insurance policy.

The previous owner had paid the entire year's property taxes of \$4,350, and the Johnson's will have to pay for their share of the taxes from March to December.

The movers charged \$1 200 for moving his furniture and other belongings, and the company he works for paid half of this.

The family decided to install new carpets into part of the house at a cost of \$2 400 plus PST and GST. The cost of hooking up telephone, TV and Internet are \$195.

Examine the Johnson family's situation and determine the additional costs for Mr. Johnson and his family.

| Manitoba Land Transfer Tax | |
|--|-------------|
| Value of property | Rate |
| on the first \$30 000 | 0% |
| on the next \$60 000 (\$30 001 to \$90 000) | 0.5% |
| on the next \$60 000 (\$90 001 to \$150 000) | 1% |
| on the next \$50 000 (\$150 001 to \$200 000) | 1.5% |
| over \$200 000 | 2% |
| TOTAL LAND TRANSFER TAX | |

| CLOSING COSTS TEMPLATE / CHECKLIST | | |
|--|--|-------|
| Initial Fees: | | |
| Inspection Fee | | |
| Mortgage Application Fee | | |
| Appraisal Fee | | |
| | Total Initial Fees: Total | _____ |
| Lawyer's Disbursement and Fees: | | |
| *Land Transfer Tax | | |
| Property Survey | | |
| Other Legal Disbursements | | |
| Legal Fees | | |
| | Total Lawyer's Disbursement and Fees: Total | _____ |
| Adjustments: | | |
| Interest Adjustment | | |
| *Property Tax Adjustment | | |
| *Home Insurance Adjustment | | |
| | Total Adjustments: Total | _____ |
| Other Additional Costs: | | |
| Service Charges | | |
| Moving Expenses | | |
| Immediate Expenses | | |
| Appliances | | |
| Decorating Costs | | |
| | Total Other Additional Costs: Total | _____ |
| GRAND Total Closing Costs and Extras: | | |

14. Maria decided to buy a house worth \$175 000. The down payment will be \$19 000 and the bank will finance the mortgage at 6.50% for 20 years.

a) Determine Maria's GDSR if the monthly property taxes are \$320, the heating costs are \$250 per month, and her gross monthly income is \$4500.

b) Unfortunately, there is a bidding war, several other families are making offers on the house so the price may go up! Using the following chart, calculate the maximum affordable price.

| Template to calculate the maximum price of a house for a given monthly payment. (Really just undoing the GDSR formula, doing algebra) | | |
|---|---|--------|
| Gross monthly household income: | = | |
| Multiply: (Gross Debt Service Ratio) | | x 0.32 |
| Total affordable household expenses | = | |
| Subtract: | | |
| Monthly property taxes | - | |
| Monthly heating costs | - | |
| Monthly affordable mortgage payment | = | |
| <p>Use a TVM Loan Calculator to determine the maximum price she can pay for the house if she has to make a higher bid.</p> <p>Do a hand-drawn 'screenshot' of the calculation →</p> | | |

| Amortization Period of Mortgage Loan When Paid Monthly (Blended payment of principal and interest per \$1000 of loan) | | | | | |
|---|----------------|-----------------|-----------------|-----------------|-----------------|
| Interest Rate | 5 years | 10 years | 15 years | 20 years | 25 years |
| 4.00% | \$18.40 | \$10.11 | \$7.38 | \$6.04 | \$5.26 |
| 4.25% | 18.51 | 10.23 | 7.50 | 6.17 | 5.40 |
| 4.50% | 18.62 | 10.34 | 7.63 | 6.30 | 5.53 |
| 4.75% | 18.74 | 10.46 | 7.75 | 6.44 | 5.67 |
| 5.00% | 18.85 | 10.58 | 7.88 | 6.57 | 5.82 |
| 5.25% | 18.96 | 10.70 | 8.01 | 6.71 | 5.96 |
| 5.50% | 19.07 | 10.82 | 8.14 | 6.84 | 6.10 |

Table 4: Tenant's Package Policy

| Tenant's Package Policy (\$500 deductible) | | |
|---|----------------------|---------------------------|
| All Areas – Manitoba | | |
| Coverage Amount | Standard Form | Comprehensive Form |
| \$25 000 | \$158.00 | \$200.00 |
| \$30 000 | \$174.00 | \$226.00 |
| \$35 000 | \$199.00 | \$252.00 |
| \$40 000 | \$212.00 | \$269.00 |
| \$45 000 | \$235.00 | \$298.00 |
| \$50 000 | \$254.00 | \$324.00 |
| \$55 000 | \$272.00 | \$346.00 |
| \$60 000 | \$293.00 | \$373.00 |
| \$65 000 | \$315.00 | \$400.00 |
| \$70 000 | \$337.00 | \$427.00 |
| \$75 000 | \$359.00 | \$454.00 |
| Each additional \$1000 | \$4.50 | \$5.50 |

\$200 deductible – Increase premium by 10%

Manitoba Homeowner's Insurance Rates

| Manitoba Homeowner's Insurance Rates (\$500 deductible) | | | | | | | | |
|---|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|
| | Winnipeg | | Area 2 | | Area 3 | | Area 4 | |
| Amount | Standard | Comprehensive | Standard | Comprehensive | Standard | Comprehensive | Standard | Comprehensive |
| \$ 50 000 | 195 | 214 | 147 | 161 | 196 | 216 | 261 | 287 |
| \$ 55 000 | 216 | 238 | 160 | 176 | 217 | 239 | 289 | 318 |
| \$ 60 000 | 237 | 260 | 173 | 190 | 237 | 261 | 315 | 347 |
| \$ 65 000 | 252 | 277 | 187 | 205 | 255 | 281 | 339 | 373 |
| \$ 70 000 | 266 | 303 | 200 | 220 | 270 | 297 | 359 | 395 |
| \$ 75 000 | 294 | 314 | 210 | 231 | 285 | 314 | 379 | 417 |
| \$ 80 000 | 310 | 323 | 221 | 243 | 302 | 332 | 402 | 462 |
| \$ 85 000 | 318 | 333 | 226 | 249 | 313 | 344 | 416 | 458 |
| \$ 90 000 | 324 | 349 | 231 | 254 | 324 | 356 | 431 | 474 |
| \$ 95 000 | 348 | 370 | 244 | 268 | 345 | 380 | 459 | 505 |
| \$100 000 | 364 | 393 | 260 | 286 | 361 | 397 | 480 | 528 |
| \$105 000 | 390 | 417 | 278 | 306 | 378 | 416 | 503 | 553 |
| \$110 000 | 402 | 441 | 293 | 322 | 393 | 432 | 523 | 575 |
| \$115 000 | 418 | 464 | 299 | 329 | 409 | 450 | 544 | 598 |
| \$120 000 | 436 | 487 | 309 | 340 | 424 | 466 | 564 | 620 |
| \$125 000 | 451 | 510 | 319 | 351 | 444 | 488 | 591 | 650 |
| \$130 000 | 472 | 543 | 339 | 373 | 466 | 513 | 620 | 682 |
| \$135 000 | 498 | 557 | 345 | 380 | 477 | 525 | 634 | 697 |
| \$140 000 | 523 | 580 | 358 | 394 | 496 | 546 | 660 | 726 |
| \$145 000 | 538 | 596 | 375 | 413 | 508 | 559 | 676 | 744 |
| \$150 000 | 550 | 604 | 385 | 424 | 520 | 572 | 692 | 761 |
| \$155 000 | 557 | 613 | 398 | 438 | 551 | 606 | 733 | 806 |
| \$160 000 | 565 | 622 | 413 | 454 | 569 | 626 | 757 | 833 |
| \$165 000 | 572 | 629 | 425 | 468 | 589 | 648 | 783 | 861 |
| \$170 000 | 590 | 647 | 441 | 485 | 609 | 670 | 810 | 891 |
| \$175 000 | 607 | 668 | 451 | 496 | 624 | 686 | 830 | 913 |
| \$180 000 | 620 | 686 | 466 | 513 | 648 | 713 | 862 | 948 |
| \$185 000 | 636 | 702 | 478 | 526 | 667 | 734 | 887 | 976 |
| \$190 000 | 652 | 717 | 492 | 541 | 705 | 776 | 938 | 1032 |
| \$195 000 | 678 | 742 | 504 | 554 | 720 | 792 | 958 | 1054 |
| \$200 000 | 692 | 771 | 519 | 571 | 726 | 799 | 966 | 1063 |
| Additional Amounts per \$1000 coverage | Add: \$3.15 | Add: \$3.50 | Add: \$2.75 | Add: \$3.03 | Add: \$3.55 | Add: \$3.91 | Add: \$4.72 | Add: \$5.19 |

\$200 deductible—Increase premium by 10%