

[Dashboard](#) / [My courses](#) / [ENG M 401 \(LEC B1 Winter 2021\)](#) / [Midterm Exam #1](#) / [Midterm Exam #1](#)

Started on Friday, 5 February 2021, 10:58 AM

State Finished

Completed on Friday, 5 February 2021, 11:47 AM

Time taken 49 mins 2 secs

Grade 100.00 out of 100.00

Question 1

Correct

Mark 10.00 out of 10.00

1. Consider the following two transactions:

Option 1: Receive \$20,000 at the time two years from now.

Option 2: Receive \$40,000 at the time eight years from now.

If your interest rate is 15% per year, which option is more economically attractive?

Select one:

- ☐ a. Option 2 by \$6000 in terms of present worth [cross out](#)
- ☐ b. Option 2 by \$2,000 [cross out](#)
- ☒ c. Option 1 by \$2,046 in terms of present worth [cross out](#) ✓
- ☐ d. Option 1 by \$2,496 in terms of equivalent value at end of year 3 [cross out](#)

Question 2

Correct

Mark 10.00 out of 10.00

2. Receiving \$7,500 at the end of each year for next five years is equivalent to what lump sum payment at the end of two years at an interest rate of 10%?

Select one:

- ☐ a. \$22,545 [cross out](#)
- ☒ b. \$34,402 [cross out](#) ✓
- ☐ c. \$25,747 [cross out](#)
- ☐ d. \$8,653 [cross out](#)

Question 3

Correct

Mark 10.00 out of 10.00

3. You just opened a mutual fund account where you contributed \$10,000. If the mutual fund grows at an annual rate of 11.5%, how long do you need to wait to see the value of the mutual fund tripled?

Select one:

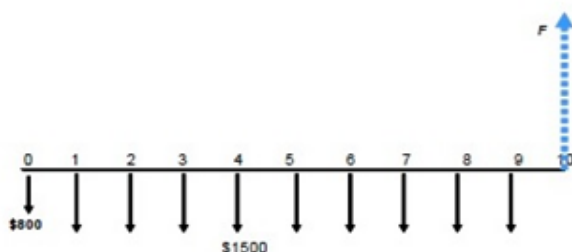
- ☐ a. about 9 years
- ☐ b. about 10 years
- ☐ c. about 10.5 years
- ☒ d. about 11 years ✓

[cross out](#)[cross out](#)[cross out](#)[cross out](#)**Question 4**

Correct

Mark 10.00 out of 10.00

4. If you make the following series of deposits at an interest rate of 12% compounded annually, what would be the total balance at the end of 10 years?



Select one:

- ☐ a. $F = \$18,600$
- ☐ b. $F = \$23,512$
- ☒ c. $F = \$27,308$ ✓
- ☐ d. $F = \$24,823$

[cross out](#)[cross out](#)[cross out](#)[cross out](#)

Question 5

Correct

Mark 10.00 out of 10.00

5. If \$2000 is deposited in a savings account at the beginning of each of 10 years (there are a total of 10 deposits) and the account draws interest at 15% per year compounded annually, the value of the account at the end of 10 years will be most nearly

Select one:

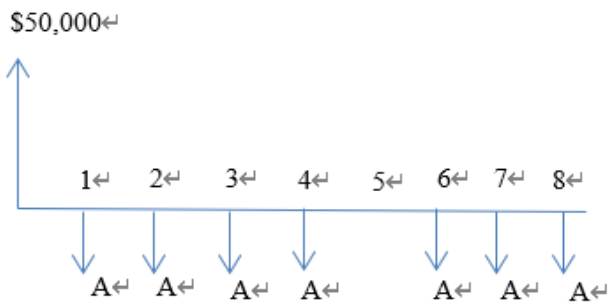
- ☐ a. \$40,607
- ☐ b. \$8,091
- ☒ c. \$46,698 ✓
- ☐ d. \$45,698

[cross out](#)[cross out](#)[cross out](#)[cross out](#)**Question 6**

Correct

Mark 10.00 out of 10.00

6. If you borrow \$50,000 at an interest rate of 10%, compounded annually, with the repayment schedule as follows, what is the amount A?



Select one:

- ☒ a. \$10,607 ✓
- ☐ b. \$7,143
- ☐ c. \$9,372
- ☐ d. \$10,270

[cross out](#)[cross out](#)[cross out](#)[cross out](#)

Question 7

Correct

Mark 10.00 out of 10.00

7. How much do you need to deposit now in a saving account that earns a 12% annual interest, if you want to withdraw the annual series as shown below?

End of Year (n)	Amount of Deposit	Amount of Withdrawal
0	P	
1		\$1,000
2		\$1,250
3		\$1,500
4		\$1,750
5		\$2,000

Select one:

- ☐ a. \$7,500
- ☒ b. \$5,204 ✓
- ☐ c. \$4,875
- ☐ d. \$3,605

[cross out](#)[cross out](#)[cross out](#)[cross out](#)**Question 8**

Correct

Mark 10.00 out of 10.00

8. Which of the following banks offers you a better interest deal for your deposit?

•Bank A: 12%, compounded quarterly

•Bank B: 11.5%, compounded continuously

Select one:

- ☒ a. Bank A ✓
- ☐ b. Bank B
- ☐ c. Indifferent
- ☐ d. Not sufficient information to decide

[cross out](#)[cross out](#)[cross out](#)[cross out](#)

Question 9

Correct

Mark 10.00 out of 10.00

9. What is the future worth of an equal quarterly payment series of \$9,000 for 11 years, if the annual interest rate is 12%, compounded monthly?

Select one:

- ☐ a. $F = \$788,646$ [cross out](#)
- ☐ b. $F = \$813,375$ [cross out](#)
- ☒ c. $F = \$807,564$ [cross out](#) ✓
- ☐ d. $F = \$759,161$ [cross out](#)

Question 10

Correct

Mark 10.00 out of 10.00

10. The following table contains a summary of how a project's balance is expected to change over its five-year service life at 10% interest.

End of year ↵	Investment / Income ↵	Interest ↵	Project Balance ↵ ↵
0 ↵	↵	↵	-\$3000 ↵
1 ↵	↵	↵	-\$3000 ↵
2 ↵	↵	↵	\$800 ↵
3 ↵	↵	↵	\$1000 ↵
4 ↵	↵	↵	\$2000 ↵
5 ↵	↵	↵	\$4000 ↵

Which of the following statements is most accurate?

Select one:

- ☐ a. The required additional investment at the end of period 1 is \$600. [cross out](#)
- ☒ b. The net present worth of the project at 10% interest is \$2484. [cross out](#) ✓
- ☐ c. The income cash flow from the third year cannot be determined. [cross out](#)
- ☐ d. Until the end of the third year, the company would not be able to recover all its investments and the cost of funds (interest) from the project. [cross out](#)

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