

DO: Amath190 Exam 2

- Due Feb 28 at 11:59pm
- Points 100
- Questions 10
- Available Feb 26 at 11:59pm - Feb 28 at 11:59pm
- Time Limit 120 Minutes
- Allowed Attempts 2

Instructions

Please answer the following questions.

You have 120 minutes to complete the exam.

You have two attempts on this assignment.

Here are the conditions for this test and on your honor you will following these conditions:

- You will work alone on this test.
- You will not seek any help from another person or website for this test
- You can use a calculator
- You can use one page of handwritten notes for this test (both sides).

[Take the Quiz Again](#)

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	49 minutes	60 out of 100

❗ Correct answers are hidden.

Score for this attempt: 60 out of 100

Submitted Feb 28 at 11:03am

This attempt took 49 minutes.



Question 1

10 / 10 pts

A 48 oz. jar of peanut butter sells for \$11.01. Jobe uses 3 oz. of peanut butter for each peanut butter sandwich they make. What would be the cost of the peanut butter if they made 8 peanut butter sandwiches?

Round your answer to the nearest penny. Do not input the dollar sign. Only input the number. For example: 3.42



IncorrectQuestion 2

0 / 10 pts

Dahn budgeted \$422 for food last month. They actually spent \$464.09 on food last month. What percent over the budget did they spend.

Round your answers to the hundredth of a percent. Only input the number. Example 12.53



IncorrectQuestion 3

0 / 10 pts

Tia used 6.34 CCF of water last month. The following is how Tia's water bill is calculated. How much will Tia's bill be for last month?

Charge	Unit Rate
Tier 1 - Up to 4 CCF, only base charge of \$12.51	
Tier 2 - next 4 and 8 CCF	\$3.08
Tier 3 - remaining CCF above 8 CCF	\$4

Round your answer to the nearest penny. Do not input the dollar sign. Only input the number. For example: 14.27



IncorrectQuestion 4

0 / 10 pts

The following is the function for electricity costs in Erin's city of residence.

$$C(k) = \begin{cases} 10.64 + 0.1010 \times k & 0 \leq k \leq 500 \\ 61.14 + 0.1025 \times (k - 500) & 500 < k \end{cases}$$

$$C(430) = \$ \text{53.07}$$

Round your answer to the nearest penny. Do not input the dollar sign. Only input the number. Example 25.36

Answer 1:

53.07



Question 5

10 / 10 pts

The following is a partial balance table for a simple interest account that deposits the interest every year.

Number of years, t	Account Balance, $B(t)$
0	\$1,962.93
9	\$2,208.44

What was the total percentage yield of the initial amount deposited after 9 years?

Round your answer to the nearest tenth of a percent. Do not input the % sign. Only input the number.

For example: 14.2

12.5



IncorrectQuestion 6

0 / 10 pts

The following is a partial balance table for a simple interest account that deposits the interest every year.

Number of years, t	Account Balance, $B(t)$
0	\$1,014.11
5	\$1,087.45

Find $B(19)$.

Round your answer to the nearest penny. Do not input the dollar sign. Input just the number. For example: 1524.32

1,322.27



Question 7

10 / 10 pts

Thong opened a compound interest account. He made an initial deposit of \$1,181. The account pays him 3.7% annual interest and is **compounded annually**. If Thong doesn't make any other deposits into this account, how many years will it take for the balance in Thong's account to be \$2,000?

Here is the Balance Function for a compound interest account.

$$B(t) = P \cdot \left(1 + \frac{r}{n}\right)^{n \cdot t}$$

Round your answer to the nearest tenth of a year. Input only the number. For example: 10.3



Question 8

10 / 10 pts

Eva opened a savings account with an initial deposit of \$888. They then deposit \$888 into that savings account at the end of **every subsequent year**. This savings account pays an annual interest rate of 3.5% and is **compounded annually**. How much will Eva have in their account after 6 years?

$$B(t) = P \cdot \frac{\left(\left(1 + \frac{r}{n}\right)^{n \cdot t} - 1\right)}{\left(\frac{r}{n}\right)}$$

Round your answer to the nearest penny. Do not input the dollar sign. Only input the number. For example: 2,153.23



Question 9

10 / 10 pts

Maple deposited \$80 per month into an account that paid 2.5% annual interest compounded monthly. The balance in the account at the beginning of month 10 was \$807.54. What was the balance in the account at the beginning of month 11 after the \$80 was deposited for that month?

Round your answer to the nearest penny. Only input the number. Example 1025.37



Question 10

10 / 10 pts

What is the APY for an account that has an annual interest rate of 4.37% and is **compounded daily** (n=365)?

$$APY = \left(1 + \frac{r}{n}\right)^n - 1$$

Round your answer to the hundredth of a percent. Input only the number. Example 5.36

Quiz Score: 60 out of 100