

Name:

MGF 1107 Section 0057
Quiz 2

Please show all of your work in a NEAT and ORGANIZED fashion.

1. (4 points) Identify the following statements as true or false. If the statement is false, correct the statement so it is true.

(a) **Simple interest** is interest paid only on the principal, while **compound interest** is interest paid both on the principal and on any interest the principal earns.

(b) A credit card works like cash: when you swipe a credit card, money is withdrawn directly from your bank account.

(c) Auto loans are a good investment because cars keep their value over time.

(d) If you pay extra on a monthly loan payment, you will have to pay less interest in the long run.

2. (4 points) (a) You deposit \$500 into savings account S at 4% annual simple interest. How much money will be in account S after 20 years?

(b) You deposit \$500 into savings account C at 4% interest, compounded annually. How much money will be in account C after 20 years?

Use the following approximations as necessary:

$$1.004^{20} \approx 1.1, 1.04^{20} \approx 2.2, 1.4^{20} \approx 837$$

3. (4 points) Suppose you have a credit card with an APR of 12%, and a required minimum payment of \$25.

Let's say you receive a bill in May for \$2,025, and you can only afford the minimum payment. Supposing that you do not use your credit card any further, and each month you only pay the minimum payment, what will be your bill in July (2 months later)?

4. (3 points) (a) Alice uses a budget. At the end of each budget cycle, if she has any money left over, she spends it as a well-earned treat. Unfortunately, one day her car breaks down and she needs \$2,000 to repair the damages. She can't afford the repairs, so she just goes without the car until she has enough money to fix it. How could Alice have avoided this situation?

(b) Bob is a very impatient man. If he sees something that he wants to buy, he buys it right away. He usually has enough money to make the purchase, but sometimes he doesn't have enough money so he just charges it on his credit card to pay back later. What advice would you give Bob?

(c) Charlie has \$20,000 in student loans that he must pay back over a 10-year period. He makes the minimum payment each month, and by the end of 8 years he has paid a total of \$20,000. However, he has still not paid off his student loans. Why not?