

Quiz 2

Every answer must be fully justified. Show your work!!!

1. Suppose that Johann buys a new couch that is priced at \$750. He pays \$100 down and finances the rest by paying \$30 each month for the next 2 years.

(a) What is the total installment price for this purchase?

(b) What is the finance charge?

2. Suppose you receive a credit card statement for the time period from April 1 - April 30. The unpaid balance on April 1 was \$400. A payment of \$250 was recorded on April 12. A \$30 purchase was made on April 5 and a \$100 purchase was made on April 25. The monthly rate for this card is 1.4% and interest is computed using the unpaid balance method.

(a) What is the interest for the time period covered by this statement?

(b) What is the total balance owed for this card on April 30?

(c) What is the average daily balance from April 1 - April 30?

3. Let $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$, $A = \{2, 4, 6, 8\}$, $B = \{1, 2, 3, 4, 5\}$. Find each of the following.

a. A'

b. $A \cup B$

c. $A' \cap B$

d. $B \cap \emptyset$

e. The number of subsets of the set B .