MAT 142 – Class Examples: Simple Interest

1. You invest $10,000 at 5% annual interest for 3 years.

   a) How much interest is earned?

   b) How much money is in your account after 3 years?

2. Borrow $5000 at $6\frac{1}{8}$ % annual interest for all of March, April and May.

   a) How much interest will you have to repay?

   b) What is the total you'll repay?

   c) If you're going to pay back the amount borrowed + the interest in 3 monthly payments, what is your payment amount?

3. You need to earn $1000 interest. You invest $10,000 at 8% annual interest. How long (in years) will this take?

4. You need to have $15,000 in 40 months. How much would you need to invest at 6.2% annual interest in order to achieve this? (to the nearest dollar)

5. You want to purchase a $20,000 car. You make a $5,000 down payment and finance the rest at 4% "add-on" interest, paid back over 5 years.

   a) What is the total you'll have to repay (amount financed + interest)

   b) What would your monthly payments be?

MAT 142 – Class Examples: Simple Interest

6. Finance Charges on a Credit Card

   a) Fill out the balances to complete this credit card listing of charges during October.

Date	Description	Amount	Balance
10/01	Opening Balance	- - -	$324.57
10/05	Payment	- $50.00	
10/11	Safeway	+$123.32	
10/20	Walgreens	+$60.97	
10/31	Ending Balance	- - -	

   b) What is the **Average Daily Balance** for the 31 days?

   c) If the interest rate is 12.99% annually, what are the month's finance charges?
      → Finance Charges are calculated based on the average daily balance ←

...the rest of the statement
   d) Fill in the amount of the finance charges and find the total balance due.

10/31	Finance Charges		

                                                                    Balance due