

Mental Math and Estimation

Use the Rule of 72 to estimate how long it will take for an investment to double at an interest rate of 1.95% per annum, compounded annually.

$$72 \div 1.95\% = 36.92 \text{ years}$$
$$72 \div 5\% = 14.4 \text{ years}$$

Mar 19-3:08 PM

GMF 10

Lesson 3.3 (1) & (2)

3.3

Credit Cards and Store Promotions



Mar 14-6:24 PM

BUY IT NOW... AND PAY LATER (YAY!)

PAY NOTHING FOR UP TO 12 MONTHS!

EXPLORE THE MATH


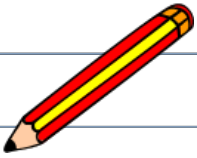
“Buy Now, Pay Later!” “Sign up for our credit card and receive a free gift!” Promotions like these are used to attract customers and sell items that customers might not otherwise be able to afford, and to have people sign up for particular credit cards. When you make use of these promotions, you are relying on credit.

Aug 14-6:33 PM

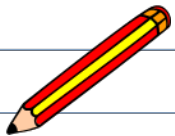
Credit: an agreement in which the borrower receives something of value, and agrees to pay for it later.

Finance charge: The total amount of interest paid to borrow a sum of money.

Feb 13-4:41 PM

<p>List 3 credit cards:</p>		
<ul style="list-style-type: none"> - American Express - Visa - Master Card 	<p><i>Before getting a credit card, make sure you understand how interest will be calculated on your purchases.</i></p>	
<p>What is a minimum payment?</p>		
<p>- the least amount you need to pay to be able to continue to use your credit card.</p>		
<p>- min. payment is \$10 or 3 - 5% of balance whichever is largest.</p>		
<p>ex: \$1000</p>	<p><i>5% of \$1000 = \$50</i></p>	

Feb 13-4:41 PM

	
<p>What is a Credit Limit?</p>	
<p>- is the maximum amount you can borrow on your credit card.</p>	
<p>Why do different people have different credit limits?</p>	
<p>- based on their income and credit rating.</p>	
<p>Credit card interest is calculated using simple interest.</p>	
<p>Formulae for credit cards: $I = Prt$</p>	
<p>*** time is always daily</p>	
<p>The number of days per month varies.</p>	

Feb 13-4:41 PM

BUILD YOUR SKILLS

pg. 306

1. Calculate the interest due on the following credit card balances:

$$I = Prt$$

a) an unpaid balance of \$2076.54 at a rate of 19.50% for 15 days;

$$I = (2076.54)(0.1950) \left(\frac{15}{365} \right) \leftarrow 15 \div 365$$

$$I = \$16.64$$

b) an unpaid balance of \$1007.48 at a rate of 21.50% for 38 days; and

$$I = (1007.48)(0.2150) \left(\frac{38}{365} \right)$$

$$I = \$22.55$$

c) an unpaid balance of \$2019.64 at a rate of 18.50% for 18 months.

$$I = (2019.64)(0.185) \left(\frac{18}{12} \right)$$

$$I = \$560.45$$

BUILD YOUR SKILLS

4. Javier's credit card charges 24.90% interest per annum. He used his credit card, which had no previous balance, to take out a cash advance of \$550.00 on December 10. Interest is calculated starting on the day of the withdrawal.

a) Javier's next statement is dated December 21. For how many days is interest calculated for the balance on this statement?

$$\text{Dec: } 21 - 10 = 11 + 1 = 12 \text{ days}$$

b) How much will he owe on his December 21 statement?

$$I = Prt$$

$$I = (550.00)(0.249) \left(\frac{12}{365} \right)$$

$$I = \$4.50 \text{ (Interest)}$$

$$550 + 4.50 = \$554.50$$

c) What is the actual cost of the cash withdrawal, if he pays his bill in full on January 10?

days: Dec: $31 - 10 = 21 + 1 = 22$

$$I = (550)(0.249) \left(\frac{32}{365} \right) \leftarrow \frac{22}{365} \text{ days}$$

$$I = \$12.01$$

Example 3

Zaynab is buying a new stove, listed at \$989.95. The store has an offer of "Nothing down, and 4 easy monthly payments of \$265.00."

- What is the total cost of the stove on the payment plan?
- Use the simple interest formula to calculate what rate of interest is being charged.



The first meal ever cooked with an electric stove was made by Canadian inventor Thomas Ahearn in 1892. The "Electric Dinner" featured consommé royal soup, Saginaw trout, sugar-cured ham, stuffed loin of veal, lamb cutlets, apple pie, and chocolate cake.

Homework

Workbook: Pg. 307 Q 2 & 3

Pg. 310 Q. 5

Pass in assignment?