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UNIT 6 LESSON 12

**AIM**: SWBAT calculate simple interest

**THINK ABOUT IT!**

Margo goes to the bank and opens a savings account by depositing $400. The bank said that it would give Margo 5% of the initial amount she deposited every year as a way of saying “Thank you” for choosing their bank.

Step A: How much money would the bank give her after 1 year?

Step B: How much money would the bank give her after 3 years?

Step C: How much money would the bank give her if she only kept it in the bank for 6 months?

Key Point:

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**Interaction with New Material**

Ex.1) Samantha spends $875 over the holiday break on gifts for friends, airplane tickets, food, and a hotel. She put everything on her credit card which charges 2.35% simple interest monthly. What will be the total cost of her holiday trip if she pays off her credit card in one year?

**PARTNER PRACTICE**

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| *Bachelor Level* |

1. Find the simple interest for $600 invested at 5% for 4 years.
2. How much interest would John earn on a $250 principal over 6 months with an interest rate of 3.5%?

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| *Master Level* |

1. Bert is planning to open a savings account that earns 1.6% simple interest. He wants to earn exactly $336 in interest after 3 years. How much money should he deposit?
   1. $70
   2. $7,000
   3. $5,376
   4. $700

**INDEPENDENT PRACTICE**

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| *Bachelor Level* |

1. Find the simple interest for $3200 invested at 7% for 2 years.
2. What is the amount of interest that Mike earns on the following: deposit is $780, interest rate is 3.2% each year, for 18 months?
3. Tonya took out a loan to help pay for her house. She borrowed $70,000 for 15 years at a simple interest rate of 5%. Which statements below are true? Select all that apply.
   1. She will pay $525,000 in interest
   2. She will pay $52,500 in interest
   3. She will pay $52,500 for the house in total
   4. She will pay $122,500 for the house in total

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| *Master Level* |

1. Find the amount of time it takes to earn $102 interest, if you deposit $340 and the interest rate is 6%.
2. Find the interest earned in three months if you deposit $500 in a savings account with an interest rate of 4% annually.
3. In one account A, you invest $2,000 in a simple interest account. The balance after 8 years is $2,720. In account B, you invest $950 and over 4 years you earn $266. Which had a better interest rate and how do you know?

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| *PhD Level* |

1. Mike is buying a car that costs $21,000. The bank loans him the money using simple interest at a rate of 5.75% annually. He doesn’t touch the account for 30 months and then starts to pay off the loan. He wants to pay off the interest first and takes 6 months to pay it off. How much would he pay back each month to pay off the interest?

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**EXIT TICKET**

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| Self-assessment | I mastered the learning objective today. | I am almost there. | Need more practice and feedback. |
| Teacher feedback | You mastered the learning objective today. | You are almost there. | You need more practice and feedback. |

1. Martin deposits $700 into a savings account that gains interest at a rate of 5.5% annually. If he waits 7 years to withdraw the money, will he have earned more or less than $275 and by how much?
2. Kristina deposits $850 into a savings account that has a yearly interest rate of 6.5%. Determine the total amount of money that she will have if she withdraws all her money 18 months later? Round your answer to the nearest cent.