| MAKING SENSE OF MATHEMATICS |  |  |
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| 1 | Bernie: | Double cheeseburger for you, and a Bernie's special and l'll have your drink to you in a minute. <br> Welcome to Bernie's Burgers, our specials today are... Oh hey! I didn't expect to see you here! (Clatter in the background) That's my buddy Chris, today is his first day. He's working to pay off his credit card debt. I've been trying to train him on bussing tables and share with him a few tips on how to get out of a credit card crises. <br> It's just about closing time, how about I bring you today's special, Credit Card Basics, we can help Chris and get another problem solved! <br> Hey man, you missed a spot. As Chris sweeps up, lets look at how he got into his credit card mess in the first place. |
| 2 | VoiceOver <br> Bernie: | Like most students his age, Chris has been getting all sorts of credit card applications in the mail. It's hard to resist all of their offers. He filled out the paper work, sent it in and started using his new card. Now he didn't go crazy, but his purchases started adding up over time. |
| 3 | Bernie: | Like a lot of us, Chris jumped into the world of credit cards without knowing a lot of the fundamentals of having and using credit. Lets go over the basics so you will know what to do to avoid the same mistakes. <br> First, keep in mind that buying with credit, refers to buying something today and paying for it later. The borrower, you, agrees to pay back the lender, credit card companies, for the cost of the purchases, plus interest and other fees associated with the card. |
| 4 | Voice- <br> Over <br> Bernie: | Take a look at Chris's current balance. The current balance is what you currently owe. This includes the previous balance plus the total purchases minus any payments and returns called credits, plus interest and other fees. |
| 5 | Bernie: | You can usually avoid paying interest by paying off your entire balance each month. If you don't, even small purchases can become considerably more expensive with interest. This is one way credit card companies make money. |
| 7 | VoiceOver <br> Bernie: | You will find interest rates expressed as the APR, Annual Percentage Rate, clearly stated on applications and monthly bills. But be careful! APR can be a little misleading. |


|  |  | Lets make this easy. Say you spend one hundred dollars on your credit card and you don't pay it off for one year. If your cards APR is twenty-four and nine tenths percent, it seems that at the end of the year, you would owe one hundred twenty-four dollars and ninety cents. But, that's not really what you'll be charged. Here's why. |
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| 8 | Bernie: | The annual percentage rate is only the simple interest rate. This means that interest is only applied on their original amount. In reality, you will be charged interest, on the interest you've already been charged. Sound confusing? <br> It's a phenomenon called, Compounding, and in our case, it occurs monthly. Lets figure out what you're really going to pay. |
| 9 | VoiceOver Bernie: | The APR is twenty-four and nine-tenths percent. If we divide the APR by twelve, for the twelve months in the year, we find the rate of interest charged each month. Since the monthly rate is a little over two percent, you will be charged two dollars and eight cents, in interest, on your one hundred purchase at the end of the first month. This is where compounds occurs. <br> At the end of the second month, you will be charged the monthly interest rate on one hundred two dollars and eight cents, rather than one hundred dollars. It may not seem like much, but watch how the balance grows over time! You will actually owe one hundred twenty-seven dollars and ninety-five cents because of compounding. That is twenty-seven dollars and ninety-five cents in interest! So the interest rate is almost twenty-eight percent when we consider compounding. We call this the Effective Annual Rate (EAR). Compare this to the Annual Percentage Rate of almost twenty-five percent. |
| 10 | Bernie: | Don't think that's a big difference? Watch how compounding effects Chris's credit card statement. |
| 10 | VoiceOver Bernie: | Here is the amount of interest he will pay in one year without compounding. Here is the amount with compounding. Wow! The Effective Annual Rate adds about one hundred dollars in interest to Chris's total balance. |
| 11 | Bernie: | Of course this is without factoring in all that late fees he would be charged if he didn't pay his bill on time. I think Chris has a better understanding of the difference between Annual Percentage Rate and the Effective Annual Rate. <br> You do don't you? |
| 12 | Chris: | Oh yeah, much better! |

