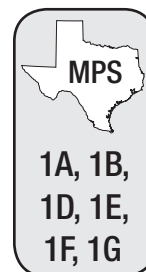


# Banking

## Instruction

### Essential Questions

1. How do you reconcile a bank statement?
2. How do you select the best savings account?
3. How does a savings account differ from a checking account?
4. How do you calculate compound interest?
5. How can you determine what savings account to choose?
6. How can graphing equations help you to make decisions?



### WORDS TO KNOW

<b>ATM (automated teller machine)</b>	a device that allows people to access funds in their accounts without having to go into the bank
<b>bank statement</b>	a summary of the activity in your account for a period of time, usually a month
<b>bounced check</b>	a check is said to “bounce” if the funds in a checking count are insufficient to cover a written check
<b>checking account</b>	an account at a bank for which checks can be drawn by the account depositor
<b>compound interest</b>	interest calculated on the initial principal and also on the accumulated interest of a deposit or loan. Represented by the formula $A = P\left(1 + \frac{r}{n}\right)^{nt}$ , where $P$ is the principal amount, $r$ is the interest rate as a decimal, $n$ is the number of times the money is compounded each year, and $t$ is the time in years the money is invested
<b>debit card</b>	a card issued by the bank that allows you to access your account funds for purchases
<b>deposit</b>	adding money to an account
<b>direct deposit</b>	payments are made directly from one account to another electronically, without the need of a check or other intermediate step
<b>maintenance fee</b>	a fee charged by some bank accounts in order to keep the account open; these fees sometimes have conditions under which they may be applied
<b>minimum balance</b>	the least amount of money a bank requires you to have in your bank account; going below this amount may incur a fee

<b>online banking</b>	this allows customers to access most banking options via the Internet, at any time
<b>overdraft</b>	when the balance of a bank account goes negative
<b>personal check</b>	a voucher that tells the account holder's bank to make a payment of a designated amount to a designated payee from the linked account
<b>principal</b>	an initial amount on money invested or borrowed
<b>savings account</b>	a bank account similar to a checking account, except it accrues interest and there may be a cap on the number of withdrawals you can make in a month
<b>simple interest</b>	interest calculated only on the principal regardless of the interest earned so far. One simple interest formula is represented $A = P(1 + rt)$ , where $P$ is the principal amount, $r$ is the percent rate per period, $t$ represents the number of time periods, and $A$ represents the maturity of a loan or savings account
<b>withdrawal</b>	taking money out of an account

## Recommended Resources

- Financial Education Private-Public Partnership. "Interest Comparison."  
<https://www.k12.wa.us/sites/default/files/public/corestandards/mathematics/pubdocs/savings-final.docx>  
Given interest rates for two bank accounts, users will determine the best bank account using mathematics.
- GeoGebra. "Exponential Functions (Graph & Equation Anatomy)."  
<http://www.walch.com/rr/05000>  
This applet provides sliders for the various values in an exponential equation, and shows how changing the values results in graph changes.
- Math Mapshell. "Representing Linear and Exponential Growth."  
<http://map.mathshell.org/download.php?fileid=1732>  
This lesson plan centers on interpreting exponential and linear functions in the context of simple and compound interest problems.