Essential Question How do checking accounts work?

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1   ACTIVITY: Writing and Entering a Check

Work with a partner. You receive a bill for three pairs of jeans.

a. Copy and complete the check for the bill.

BILL

Green Jean Shop
123 Main Street
town, USA

Due Date: 06/04/2012

Invoice Number: 1209045
05/16/2012
$146.77

Write the name of the person or company receiving the check.

Write the date.

Bill To

Your Name
Your Address

1001

DATE _____

PAY
TO THE
ORDER OF _____ $ [   ]

Write the dollar amount of the check.

_____ DOLLARS

Write the dollar amount in words. Use a fraction for cents, such as $\frac{45}{100}$ for $0.45.

TOTAL

Your Financial Institution
Address of Your Financial Institution
City, State   12345

Green

FOR _____

Sign your name.
Do not print.

Use this part of the check as a reminder of what you are paying for.

⑆123456789⑆   ⑈1234567⑈ 1001

Subtotal	$113.85
Sales Tax	$ 7.97
Shipping	$ 24.95
Total Due	$146.77

b. Enter the check in your checkbook registry below.

c. Copy and complete your checkbook registry.

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			100.00
5/11/12	996	Grocery Store		29.55	
5/11/12		Deposit Paycheck	482.75		
5/16/12		ATM Withdrawal		100.00	
5/17/12	997	Gym Membership		22.35	
5/17/12	998	Cell Phone Company		58.00	
5/17/12	999	Car Payment		82.66	
5/18/12		Deposit Paycheck	501.50		
5/18/12	1000	Birthday Gift		41.28	

2 ACTIVITY: Reconciling Your Account

Work with a partner. Your monthly bank statement shows that the balance of your account is $602.96. This balance does not agree with your balance. You notice that you did not enter the two transactions shown below in your checkbook registry.

- **5/16/12 ATM Fee $2.50 (debit)**
- **5/24/12 Interest $1.82 (credit)**

Enter these transactions and the check you wrote in Activity 1 in your checkbook registry. Does your balance now agree with the bank statement?

Date	Check #	Transaction	Credit	Debit	Balance
5/17/12	998	Cell Phone Company		58.00	372.85
5/17/12	999	Car Payment		82.66	
5/18/12		Deposit Paycheck	501.50		
5/18/12	1000	Birthday Gift		41.28	

3 ACTIVITY: Choosing a Checking Account

RESEARCH PROJECT **Research the checking accounts offered by three different banks. (Do this online or by visiting banks and collecting brochures.)**

Write a report that compares the different features of the checking accounts. Then decide which account is best for you.

- **Does the account pay interest?**
- **Is there a minimum initial deposit?**
- **Are the checks free?**
- **What is the overdraft fee?**
- **Is the ATM card free to use?**
- **Is online banking free?**

What Is Your Answer?

4. **IN YOUR OWN WORDS** How do checking accounts work?

Practice → Use what you learned about checking accounts to complete Exercise 3 on page A32.

Key Vocabulary 🔊

checking account, *p. A30*
checkbook registry, *p. A30*
debit card, *p. A30*
bad check, *p. A31*

A **checking account** is a service provided by a financial institution (such as a bank or credit union) that allows you to deposit money in an account and then write personal checks using money from the account. A **checkbook registry** is used to record credits to an account and debits from an account.

EXAMPLE 1 Completing a Checkbook Registry

You balance your checkbook at the end of the month.

a. Complete the balance column. What is the ending balance?

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			275.58
9/2/12	1308	Grocery Store		70.89	204.69
9/5/12		Deposit Paycheck	402.98		607.67
9/5/12	1309	Cable Company		35.60	572.07
9/7/12	1310	Cell Phone Company		65.40	506.67
9/9/12	1311	Car Payment		239.17	267.50
9/12/12	1312	Electric Company		72.54	194.96
9/12/12		Deposit Paycheck	402.95		597.91
9/16/12	1313	Birthday Gift		25.00	572.91
9/19/12		Deposit Paycheck	402.57		975.48
9/23/12	1314	Dinner		42.00	933.48
9/25/12	1315	Gas Company		45.75	887.73
9/26/12		Deposit Paycheck	403.08		1290.81
9/29/12	1316	Rent		450.00	840.81

Calculations

275.58 − 70.89
204.69 + 402.98
607.67 − 35.60
572.07 − 65.40
506.67 − 239.17
267.50 − 72.54
194.96 + 402.95
597.91 − 25.00
572.91 + 402.57
975.48 − 42.00
933.48 − 45.75
887.73 + 403.08
1290.81 − 450.00

⫶∴ The ending balance is $840.81.

b. Your monthly bank statement shows a balance of $1290.81. Explain why your balance does not agree with the bank statement.

⫶∴ The balance on the bank statement is equal to your balance on 9/26/12. Because Check #1316 is close to the end of the month, it likely was not processed in time to appear on your statement.

🔴 On Your Own

Now You're Ready
Exercise 4

1. You write a check on 9/30/12 for $74.95 to the auto shop, and another on 10/1/12 for $120.85 to the plumber. Complete two more rows in the registry for these checks. What is your new balance?

Reading

ATM stands for Automated Teller Machine.

Most banks include a **debit card**, or check card, with a checking account. This card allows you to withdraw cash from ATMs *and* pay for purchases in stores. The money is taken directly from your account.

🔊 **Multi-Language Glossary at BigIdeasMath.com.**

EXAMPLE **2** **Choosing a Checking Account**

New Customers

Basic Checking
- $20 monthly fee
- free ATM usage

Regular Checking
- no monthly fee
- $2 charge for each ATM withdrawal

How many ATM withdrawals must you make each month for the cost of *Regular Checking* to be greater than the cost of *Basic Checking*?

Use a model to write and solve an inequality.

Words   Cost per withdrawal   times   the number of withdrawals   is greater than   the monthly fee.

Variable   Let w be the number of withdrawals.

Inequality   2   • w >   20

$$2w > 20 \qquad \text{Write the inequality.}$$
$$w > 10 \qquad \text{Solve for } w.$$

⋮• You must make more than 10 withdrawals each month.

A **bad check**, or "bounced" check, occurs when the amount written on the check is greater than the balance available in the checking account. Many banks charge a fee for a bad check.

EXAMPLE **3** **Finding a Bad Check**

Which check is the bad check?

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			190.60
6/2/12	417	Clothing Store		69.95	120.65
6/3/12		Deposit Paycheck	370.54		491.19
6/3/12	418	Gas Company		52.37	438.82
6/5/12	419	Cell Phone Company		75.89	362.93
6/7/12	420	Car Payment		275.10	87.83
6/9/12	421	Water Company		93.75	−5.92
6/13/12		Deposit	100.00		94.08
6/14/12	422	Birthday Gift		25.00	69.08

The amount of Check #421 is greater than the available balance.

⋮• So, Check #421 is the bad check.

On Your Own

Now You're Ready
Exercises 5 and 7

2. **WHAT IF?** In Example 2, there is a $15 monthly fee for *Basic Checking*. How many ATM withdrawals must you make each month for the cost of *Regular Checking* to be greater than the cost of *Basic Checking*?

3. Write an inequality that describes the possible car payments for Check #420 in Example 3 that may result in a bad check. Explain.

✓ Vocabulary and Concept Check

1. **VOCABULARY** What information do you need to know to enter a transaction in your checkbook registry?

2. **VOCABULARY** How do you know if a check is a bad check?
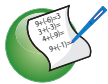
Practice and Problem Solving

3. Your checkbook registry is shown.

   a. Copy and complete your checkbook registry.

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			300.00
3/4/12	506	Dinner		45.32	
3/7/12		ATM Withdrawal		80.00	
3/8/12	507	Electric Company		39.76	
3/14/12		Deposit	150.00		
3/18/12	508	Credit Card Payment		129.50	

   b. Your monthly bank statement shows that your account balance is $81.12. You notice that you did not enter the two transactions shown below in your checkbook registry. After entering these transactions in your checkbook registry, does your balance now agree with the bank statement?

   - 3/7/12   ATM Fee $2.00
   - 3/10/12   Department Store $72.30

① 4. You balance your checkbook at the end of the month.

   a. Complete the balance column. What is the ending balance?

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			756.90
1/2/12	1563	Cell Phone Company		78.83	
1/5/12	1564	Grocery Store		132.70	
1/8/12		Deposit Paycheck	1567.00		
1/11/12	1565	Mortgage Payment		876.00	
1/13/12	1566	Credit Card Payment		651.25	
1/18/12		ATM Withdrawal		40.00	
1/20/12	1567	Grocery Store		143.78	
1/24/12		Deposit Paycheck	1567.00		
1/29/12	1568	Gas Company		68.23	

   b. Your monthly bank statement shows a balance of $1968.34. Explain why your balance does not agree with the bank statement.

2 **5.** How many ATM withdrawals must you make each month for the cost of *Basic Checking* to be greater than the cost of *Advanced Checking*?

BASIC CHECKING
- **$10 monthly fee**
- **$0.50 charge for each ATM withdrawal**

Anytown Community Bank
Anytown, USA

ADVANCED CHECKING
- **$20 monthly fee**
- **free ATM usage**

Anytown Community Bank
Anytown, USA

6. ERROR ANALYSIS Describe and correct the error in the checkbook registry.

✗

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			760.00
4/5/12	1462	Gas Company		34.00	726.00
4/6/12		Deposit		154.00	572.00

3 **7.** Complete the balance column. Which check is the bad check?

Date	Check #	Transaction	Credit	Debit	Balance
		Balance Forward			230.50
11/3/12	1021	Electric Company		37.29	
11/8/12	1022	Shoe Store		49.21	
11/9/12	1023	Credit Card Payment		173.80	
11/12/12		Deposit Paycheck	275.00		
11/17/12	1024	Car Payment		133.61	
11/26/12		Deposit Paycheck	275.00		
11/29/12	1025	Rent		375.00	

8. *Critical Thinking* When you write a bad check, a bank charges a fee of $30.

   a. How will the bad check fee change the checkbook registry in Exercise 7?

   b. What mistakes can lead to writing a bad check? How can you avoid writing a bad check?

Fair Game Review *What you learned in previous grades & lessons*

Write the number in scientific notation.

9. 0.000000079

10. 1,500,000

11. 360,000,000,000

12. 0.000024

13. MULTIPLE CHOICE An account earns 4% interest compounded annually. The balance after 3 years is $618.68. What is the principal?

   A $500   **B** $525   **C** $550   **D** $600