



#### **2-2 Reconcile a Bank Statement**

Advanced Financial Algebra

#### How Do Checking Account Users Make Sure That Their Records are Correct?

- A customer keeps a record of all transactions (hopefully ☉) and so does the bank.
- Every month, the bank sends you (or makes available online) a list of those transactions and your related account balance including:
  - O Account #
  - O Dates
  - Starting and ending balance in your account
  - O Deposits, withdrawals and other transactions list

• NOTE: You should keep a record of all transactions in your checking account, including checks written, deposits made, fees paid, ATM withdrawals, and so on. This record is a **check register**.

#### **Reconciling a Bank Statement**



• Look at your bank statement and make sure that all of the information is correct.

• Compare the bank's list of activity with yours and your balance (\$ in bank) to make sure that you agree.

• I occasionally find errors that need to be corrected by me or the bank.

#### Example 1 – steps to reconcile statement

• Look at Michael's check register and bank statement and compare them to reconcile his account for November.

• STEP 1: Look at check register and bank statement (see next slide) and check off common transactions. See red x's on next slide.

• STEP 2: Find ALL transactions that are not listed on BOTH documents.

Example 1 continued – reconcile bank statement

STEP 3: Find ending bank balance (see red arrow below) = \$628.23

STEP 4: Find balance in Michael's check register at bottom right = \$641.13

Michae 17 Breez Lake City	el Biak te Way y, FL 32025		ACCOUNT NUMBER: 7843390 STATEMENT PERIOD: 11/01 - 11/3						
			STARTING BALANCE -	+ \$ 791.95					
DATE	DESCRIPTION	CHECK NUMBER	TRANSACTION AMOUNT	BALANCE					
11/05	DEPOSIT		35.00 ×	\$ 826.95					
11/11	DEPOSIT		100.00 ×	\$ 926.95					
11/13	W/D	1770	158.08 ×	\$ 768.87					
11/17	W/D	1768	46.50 ×	\$ 722.37					
11/19	W/D	1769	74.64 ×	\$ 647.73					
11/27	W/D	1765	19.50 ×	\$ 628.23					
~~	~~~~		ENDING BALANCE	+ \$ 628.23					

CHANGES THAT	AFFECT YO	URACCOUNT	SUBTRAC	tions	_		ADDITIONS	s	BALANCE FORM	NAR
ITEM NO. FOR TRANSACTION CODE	DATE	DESCRIPTION OF TRANSACTION	AMOUNT ( PAYMENT WITHDRA	OR NAL	Ý	OTHER	AMOUNT O DEPOSIT O INTEREST	ж Я	748	9.
17/2	10/12	TO Deepdale Country Club	50	00					- 50	0
1165	10/15	FOR Swimming lessons	50	00					698	9
1764	10/12	TO Joe's Sporting Goods	10	00		2			- 48	0
1764	10/15	FOR Tennis Racket	40	00	*				650	9
17/5	10/10	TO Ellio's Pizzeria	10	50	V				- 19	3
1165	10/14	FOR Pizza Party	17	50	^				631	4
17//	10/15	10 Bethpage Auto Parts	0	00	1				- 9	6
1766	10/15	FOR Air Filter	7	00	1				622	4
	10/15	TO Deposit	v 100 00 + 100 72: Garage 18 00 − 10	+ 100	6					
17/7	10/15	FOR					100	a	722	4
17/7	10/11	TO Maple Place Garage	10	00					- 18	6
1161	10/16	FOR Inspection	10	00					704	4
17/0	10/10	TO Ticket Man	- 11	50	x				- 46	3
1768	10/18	FOR Concert Tickets	70	50	1	^			657	1
17/9	10/21	10 Caruso's Restaurant	74	10	x				- 74	1
1167	10/21	FOR Dinner	14	07	$\sim$				583	L
1770	10/22	TO Mickel's Home Center	158	08					- 158	4
1110	10/22	FOR Tool Chest	150	00	^				425	1
1771	11/4	TO Aunt Bella's Restaurant	29	10					- 29	L
	11/4	FOR Dinner		"					396	L
	11/5	10 Deposit	1		X		35	00	+ 35	4
	11/5	FOR			^			~	431	
1772	11/9	TO Living Color Lab	15	00					- 15	4
title		FOR Film Developing	~						416	1
	11/11	10 Deposit	-		х		100	00	+ 100	6
		FOR	-		~		100	~	516	1
	12/1	10 Deposit	-				125	00	+ 125	6
	14/1	FOR					10	~	641	1

# Example 1 continued – reconcile bank statement

 NOTE: Those two numbers are not equal because not all of his checks have gone to the bank and been subtracted from his account and his last deposit was on December 12<sup>th</sup> which is not on the bank statement.

#### • OUTSTANDING WITHDRAWALS:

O Check # 1763	\$50.00
O Check # 1767	\$18.00
O Check # 1771	\$29.10
O Check # 1772	<u>\$15.00</u>
O Total:	\$112.10

#### • STEP 5: **<u>RECONCILIATION</u>**

O Bank statement ending balance	\$628.23
<ul> <li>+ Total deposits outstanding</li> </ul>	+ \$125.00
<ul> <li>Total withdrawals outstanding</li> </ul>	<u>- \$112.10</u>
<ul> <li>Revised statement balance</li> </ul>	\$641.13

- STEP 6: Does that adjusted balance agree with Michael's check register?
  - If yes, you are done RECONCILED ©
  - If not, go back and find errors.

### Example 2 – Formula for reconciling a bank statement (not required to memorize)

O Use algebraic formulas and statements to model the check register balancing process.

• SOLUTION:

<ul> <li>Bank statement ending balance</li> </ul>	a	
<ul> <li>+ Total deposits outstanding</li> </ul>	+ b	d = a + b - c
O -Total withdrawals outstanding	<u>- C</u>	
• Revised statement balance	= d	d = r Q

STEP 6: Does that adjusted balance agree with Michael's check register (we will call this r)?
 If yes (d = r), you are done RECONCILED © GOOD!!!

 $\circ$  If not (  $\neq$  ), go back and find errors.

#### Example 3 – Reconcile Using a Spreadsheet

- Marina and Brian have a joint checking account (together).
- Their check register balance says \$3,839.25.
- The bank statement has an ending balance of \$3,450.10.
- Not reported on the statement are deposits of \$2,000.00, \$135.67, \$254.77, and \$188.76 and four checks for \$567.89, \$23.83, \$598.33, and \$1,000.00.
- Reconcile the bank statement.

	А	В		С
1				
2	Outstanding	Outstanding		
	Deposits	Checks		
3	2,000.00	567.89		
4	135.67	23.83		
5	254.77	598.33		
6	188.76	1,000.00		
7				
8				
9				
10	2,579.20	2,190.05	Total	
11				
12	Chec	k register balance		3,839.25
13	Stateme	nt ending balance		3,450.10
14	Revised statemen	t balance		3,839.25
15				
16	Statement is reco	nciled.		

#### Assignment: pg 77 #3, 5-8 all, 10, 12

**O** #3

Ken filled out this information on the back of his bank statement. Find Ken's revised statement balance. Does his account reconcile?

Checking Account Summ	nary
Ending Balance	\$ 197.10
Deposits	+\$600.00
Checks Outstanding	- \$615.15
Revised Statement Balance	-
Check Register Balance	\$ 210.10

#5

Jill has not been able to maintain the \$1,000 minimum balance required to avoid fees on her checking account. She wants to switch to a different account with a fee of \$0.20 per check and a \$12.50 monthly maintenance fee. Jill wants to estimate the fees for her new account. Below is a summary of the checks she has written from May to August.

Month	Number of Checks on Statement
May	14
June	19
July	23
August	24

What is the mean number of checks Jill wrote per month during the last four months?

Based on the mean, estimate how much Jill expects to pay in per-check fees each month after she switches to the new account.

Estimate the total monthly fees Jill will pay each month for the new checking account.

#### • #6 NOTE: Check register is on next slide.

Use Tina Weaver's monthly statement and check register to reconcile her account.

Tina Weaver 41 Slider Lane Greenwich, CT 06830 ACCOUNT NUMBER: 766666600A STATEMENT PERIOD: 3/01 - 3/31

DATE	DESCRIPTION	CHECK NUMBER	TRANSACTION AMOUNT	BALANCE
3/3	W/D	395	\$ 79.00	\$ 792.50
3/4	DEPOSIT		\$ 600.00	\$ 1,392.50
3/10	W/D	396	\$ 51.10	\$ 1,341.40
3/14	W/D	393	\$ 12.00	\$ 1,329.40
3/19	W/D	394	\$ 133.81	\$ 1,195.59
3/24	DEPOSIT		\$ 250.00	\$ 1,445.59
3/30	W/D	398	\$ 11.40	\$ 1,434.19
			ENDING BALANCE -	+ \$1,434.19

• #6 continued

- NOTE: question is on next page
- This is her check register.

NUMBER OR CODE	DATE	TRANSACTION DESCRIPTION	PAYME	NT	1	FEE	DEPOSI	r T	\$ BALANCE
392	2/20	Conn Telephone Co.	\$ 76	80	1				871.50
393	2/21	Rod's Bike Shop	12	00					859.50
394	3/1	Window's Restaurant	133	81					725.69
395	3/2	Centsible Bank	79	00					646.69
	3/4	Deposit					600	00	1,246.69
396	3/4	Spear's Department Store	51	10					1,195.59
397	3/15	Mary Lewis	50	00					1,145.59
398	3/21	Sea Cliff Records	11	40					1,134.19
	3/23	Deposit					250	00	1,384.19
399	4/2	Ciangiola Motors	39	00					1,345.19
	4/2	Deposit					700	00	2,045.19

• #6 continued

What is the ending balance on the statement?

What is the total of the outstanding deposits?

What is the total of the outstanding withdrawals?

What is the revised statement balance?

What is the balance of the check register?

Does the account reconcile?

T

- #7 Donna has a checking account that charges \$0.15 for each check written and a monthly service charge of \$9.75.
  - Write a formula that Donna can use each month to find the fees she will be charged.
  - Identify any variable (letter) you use in the formula.
- #8 Mason discovered that when he recorded a deposit of \$75 two weeks ago, he mistakenly subtracted it from the running total in his check register. He decided that he would write a new entry after his most recent entry and add \$75.
  - Will this correct his mistake?
  - Explain why or why not.

#### • #10 See check register on next slide.

Allison 3 Honey Dallas, T	Shannon <sup>Drive</sup> X 75372		ACCOUNT NUMB STATEMENT PER	ER: 76574709A IOD: 12/01 - 12/31
			STARTING BALANCE -	→\$1,685.91
DATE	DESCRIPTION	CHECK NUMBER	TRANSACTION AMOUNT	BALANCE
DATE 12/08	DESCRIPTION	CHECK NUMBER 1502	TRANSACTION AMOUNT 147.28	<b>BALANCE</b> \$ 1,538.63
DATE 12/08 12/10	DESCRIPTION W/D W/D	CHECK NUMBER 1502 1501	147.28 130.00	\$ 1,538.63 \$ 1,408.63
DATE 12/08 12/10 12/15	DESCRIPTION W/D W/D DEPOSIT	CHECK NUMBER 1502 1501	TRANSACTION AMOUNT 147.28 130.00 749.00	<b>BALANCE</b> \$ 1,538.63 \$ 1,408.63 \$ 2,157.63
DATE 12/08 12/10 12/15 12/23	DESCRIPTION W/D DEPOSIT W/D	CHECK NUMBER 1502 1501 1504	TRANSACTION AMOUNT 147.28 130.00 749.00 250.00	BALANCE \$ 1,538.63 \$ 1,408.63 \$ 2,157.63 \$ 1,907.63
DATE 12/08 12/10 12/15 12/23 12/27	DESCRIPTION W/D DEPOSIT W/D W/D	CHECK NUMBER 1502 1501 1504 1503	TRANSACTION AMOUNT 147.28 130.00 749.00 250.00 72.00	BALANCE \$ 1,538.63 \$ 1,408.63 \$ 2,157.63 \$ 1,907.63 \$ 1,835.63

account

• #10 continued

CHANGES THAT	AFFECT YOU	UR ACCOUNT	SUBTRAC	TIONS			ADDITIONS	s	BALANCE FORM	NARI
ITEM NO. FOR TRANSACTION CODE	DATE	DESCRIPTION OF TRANSACTION	AMOUNT I PAYMENT WITHDRAY	AMOUNT OF PAYMENT OR WITHDRAWAL		OTHER	AMOUNT O DEPOSIT O INTEREST	0F DR	1,685	91
	11/20	TO Girl Scouts	20						- 32	00
1500	11/20	FOR Cookies	52	00					1,653	9
1000		TO Bank of Scaford	100		-	0			- 130	0
1501	11/30	FOR Loan Payment	- 130 00 - 147 28	00	V				1,523	9
15.00	10.10	TO Lacy's Department Store	4.07			6			- 147	2
1502	12/2	FOR Radio	14/ 22	28	v				1,376	6
00000	503 12/11 TO Charge Tix FOR Concert Tickets 7.	TO Charge Tix	70		2	0			- 72	0
1505		12	00	Y				1304	6	
	10.100	TO Deposit			~	8	240		+ 749	0
	12/15	FOR					149	00	2,053	6
1500	10 111	TO FLASHCARD	250		2	e			- 250	0
1504	12/16	FOR Monthly payment	32 00 130 00 00 147 28 72 00 72 00 100 00 26 00	Č				1,803	6	
1000	10.104	TO Red Cross	100						- 100	0
1505	12/11	FOR Donation	100	00	_	_			1,703	6
1501	10 /10	TO Daily Newspaper	al	00	3	e.			- 26	0
1506	12/18	FOR Subscription	26	00	Y				1,677	6
	115	TO Deposit					150	00	+ 150	0
	1/5	FOR					150	00	1,827	6

- #12 When comparing his check register to his bank statement. Donte found that he had failed to record deposits of \$55.65, \$103.50, and \$25.
  - a) What is the total of these amounts?
  - b) How will he use this information to reconcile his account?