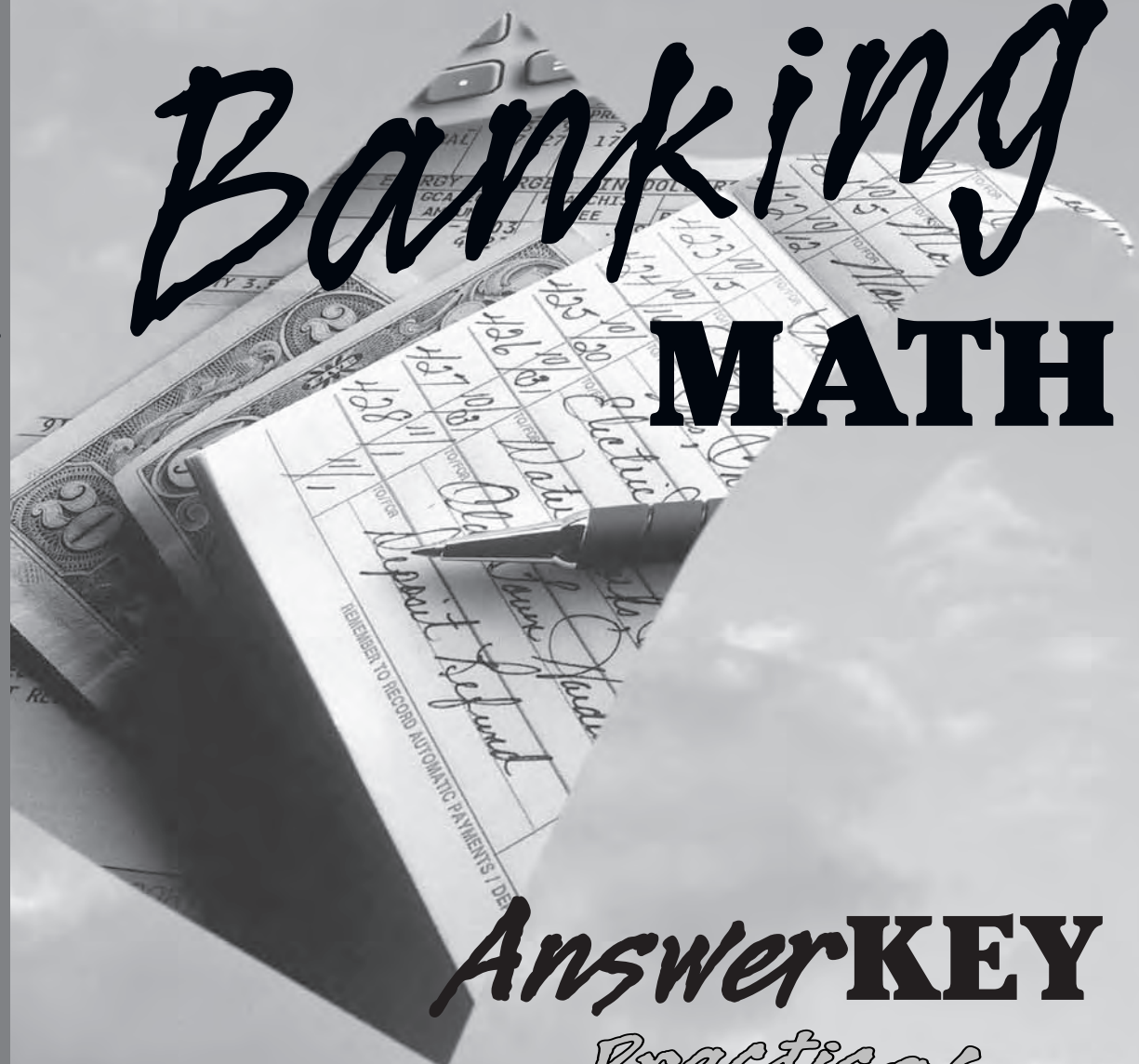


# BUDGETING

# & Banking MATH

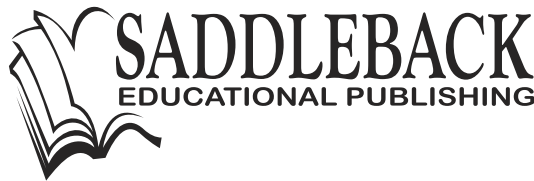


*Answer* **KEY**

*Practical*  
**MATH**  
*in Context*

# **Practical Math in Context**

## **Book 4 Budgeting & Banking Teacher's Notes**



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# To the Teacher

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Welcome to *Budgeting & Banking*, Book 4 of the *Practical Math in Context* series.

Mastery of practical math skills is the overarching goal of the *Practical Math in Context* series. To this end, each of the six books has been carefully designed to present topics students are likely to encounter in everyday life. Each book includes problems that involve estimation, equations, mental math, calculators, and critical thinking. Each book includes additional concept-specific skills such as graphing, averages, statistics, ratios, and measurement.

The books are appropriate for use with small groups, a full class, or by independent learners. The self-explanatory nature of the lessons frees the teacher for individual instruction. Each unit begins with a preview lesson, which models and explains the types of problems students will encounter in the unit. Then there are five lessons, at least one of which is a game. Game titles are italicized in the Table of Contents, on the lesson pages, and in the Answer Key. Each unit ends with a review of the unit concepts. Both illustrations and graphic art are used to support the instruction and maintain interest. A variety of problem types and games are used to sharpen critical thinking skills throughout the program.

Below are the titles of the other books in the *Practical Math in Context* series:

Book 1: Everyday Life

Book 2: Home & School

Book 3: On the Job

Book 5: Smart Shopping

Book 6: Sports, Hobbies, & Recreation

Students from middle school through adult classes will appreciate the practical content of each book.

Through modeling, practice, and review, students will build their math skills and learn to approach everyday mathematical situations with confidence. *Practical Math in Context* will help your students become successful problem solvers!

# Notes

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# Budgeting & Banking

# Answer Key

## Unit 1: Paying Your Way

### Lesson 1: Sharing Day-to-Day Costs

- a.  $\frac{6}{10}$  or  $\frac{3}{5}$ ; b. \$457.50
- Show bills that total \$152.
- C \$400
- \$14.00

**Challenge Problem.** Sample answer: Yes.  $(4 \times 4 + 4) \div 4 - 4 = 1$  or  $(x \times x + x) \div x - x$  because this always equals 1.

### Lesson 2: Budgeting for Special Items

- B  $\frac{x}{6} = \frac{60}{1}$
- Spread 36 hours (for 9 remaining drawings) between Wednesday and Saturday.
- \$20.05
- Sample:  $(\$3,600 + \$1,600 \times 2) \div (12 \text{ months} \times 2) = \$283.33$  per month

**Challenge Problem.** Explanations will differ. To explain, you could try using  $x$  for the original number and using algebra.

### Lesson 3: Saving, a Little at a Time

- a. 25; b. 2,500; c. 500
- B \$10
- Circle \$600, \$300, \$250; Draw a square around \$400.
- Year 1: Year's Savings \$2,500; Accumulated Savings: \$2,500; Year 2: Income \$27,000; Year's Savings \$2,700; Accumulated Savings: \$5,200; Year 3: Income  $1.08 \times \$27,000 = \$29,160$ ; Year's Savings \$2,916; Accumulated Savings: \$8,116

**Challenge problem.** 297

### Lesson 4: Using Bank Services

- C  $f = (\$0.05 \times t) + \$4$
- Answers may vary. Key facts include the number of monthly transactions and that Jere's bank will

charge her a fee of \$5.80 this month. The bank across the street would only charge \$5.00.

- Yes  $\$1,483.82 - \$525.00 - \$745.00 = \$213.82$
- Circle \$1.

**Challenge Problem.** Answers will vary. Some key facts include how you use the debit card; whether you need more than \$500 in the account (\$2,000–\$5,000); whether you like to pay off your credit card debts without incurring interest charges; current versus future expenses and income.

### Lesson 5: It All Adds Up!

- A 1
- 4; the corner squares each have 2 open edges.

$3 \times 5$ $2^2 + 3$ $\sqrt{25} \times 2^2$ $2^2 \times 3$	$40 - \sqrt{25}$ 50% of 40 $\frac{1}{7}$ of 49 $(2^2 \times 3^2) \div 4$	$6 \times 0.5$ $\sqrt{49}$ $100^0$ $85^0 + 10^1$
20% of 60 $4 \times 5$ $4^2 - 3$	$10 - \sqrt{1}$ $0.025 \times 120$ $5 \times 9$ $4^2$	$\frac{1}{8}$ of 88 $\frac{1}{2}$ of $10 \times 3^2$ $(3 \times 6) - 3$ $1 + 7$
$\sqrt{16} + 3^2$ $\frac{1}{5}$ of 75 $\frac{1}{6}$ of 120 $70 \div \sqrt{4}$	$3^3 - 11$ $3 \times 7 - 1$ 18% of 50 13 + 8	$11 - 3$ 9% of 100 $7 \times \sqrt{25}$ $1^2 + 2^2 - 4$

### Review

- a.  $\frac{11}{20}$ ; b. \$570
- B  $\frac{x}{3} = \frac{125}{1}$
- a. Circle 100% inside the circle;  
b. Circle \$10,000 outside the circle.
- D  $f = \$0.05 \times t + \$5$

## Unit 2: Buying Large Items

### Lesson 1: Buying a Car

- \$3,000
- 

0%-interest plans	Pay off in 1 year	Pay off in 2 years	Pay off in 3 years
\$1,000 down payment	\$1,325/month	\$662.50/month	\$441.67/month
\$2,000 down payment	\$1,241.67/month	\$620.83/month	\$413.89/month
\$5,000 down payment	\$1,158.33/month	\$579.17/month	\$386.11/month

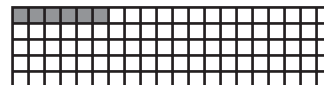
Faye computed these monthly payments based on a \$3,000 down payment.

- B \$12,740
- Car 1 Insurance: \$1,600; Total cost: \$7,000.  
Car 2 Car cost: \$6,600; Insurance: \$1,456; Total cost: \$8,056.  
Answers will vary. Key facts include value of reduced insurance cost, value of car for resale, value of additional accessories, amount of money that you can afford.

**Challenge Problem.** \$54.45

### Lesson 2: Buying a Home

- \$210
- C \$450
- 28%; \$560; \$560; \$80,000
- 

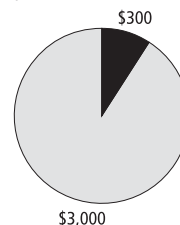


**Challenge Problem.**

Taxing Body	Tax rate	Taxes owed
State	0.02%	\$13
County	0.62%	\$403
Town	0.44%	\$286
School District	1.47%	\$955.50
Library	0.12%	\$78
<b>TOTAL ANNUAL TAXES</b>		<b>\$1,735.50</b>

### Lesson 3: College Costs

- D \$4,708.90
- Amount owed after 2 years = \$3,300



- $(\$2,000 \times 1.02) + (\$1,500 \times 1.05) = \$3,615$
- D  $\$4,500 + 6(1,500 \times 0.05)$

**Challenge Problem.** Answer will vary. One key fact is that costs typically increase with the age of the child.

## Unit 2 (continued)

### Lesson 4: What Do You Owe?

- 9
- C 5

### Lesson 5: Buying Insurance

- a.  $\frac{1}{9}$ ; b. \$160
- B \$3,300
- a. \$288  
b. \$160  
c. not buying
- 

Years after purchase	Time left on guarantee / total years	Value
1	$\frac{4}{5}$	\$228
2	$\frac{3}{5}$	\$171
3	$\frac{2}{5}$	\$114
4	$\frac{1}{5}$	\$57
5	0	\$0

**Challenge Problem.** Answers will vary. Based on last year, key facts include cost of towing without towing coverage (\$160) versus cost of towing with towing coverage (\$53) and the probability of requiring a tow with an aging vehicle.

### Review

- $x \times 24 = p$ ; \$2,500 +  $(x - 50) \times 20 = p$ ; \$375; \$9,000
- C  $0.007 \times \$40,000$
- 

Year	Balance at start of year	Interest incurred	Balance at end of year
1	\$6,000	\$390	\$6,390
2	\$6,390	\$415.35	\$6,805.35

- a. Check that diagram shows Hal's car insurance is  $\frac{3}{25}$  of his monthly income;  
b. \$165
- buying

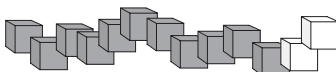
## Unit 3: Unplanned Expenses

### Lesson 1: Telephone & Other Bills

- \$1,320
- a. Circle 22;  
b. Draw a square around \$5.20.
- C \$80; Answers will vary. One possible answer would be to take the

average (mean) of the last three months' unexpected expenses.

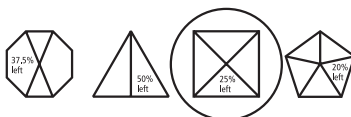
4.



**Challenge Problem.** Your friend has 3. If your friend had 14, then your friend would know that you have 7, but your friend does not know, so your friend must have 3.

### Lesson 2: Doctors, Dentists, & Veterinarians

- \$6
- B 10
- $(\$110 + \$650 + \$35) \div 6 = \$132.50$
- 



**Challenge Problem.**

1	1
3 5	4
7 9 11	9
13 15 17 19	16
21 23 25 27 29	25

10,000. Answer is the square of the row number.

### Lesson 3: Careful Spending

- 1, 1
- A 5 in row 1, column 5

2	1	2	X	5	X
5	1	1	X	X	3
X	X	5	1	3	1
1	7	X	1	1	X
2	X	X	4	1	3
X	1	2	4	X	3

### Lesson 4: Unplanned Repairs

- $x/(\$180 + x) = \frac{1}{5}$
- Answers will vary. One answer is that she saves \$130 by not having the bug shield catch replaced. Another is that she saves \$130 plus the \$20 she made. On the other hand,

she no longer has the shield.

- A \$117.50
- 

4.

Month	0	1	2	3	4
Balance of repair bill	\$520	\$420	\$370	\$320	\$270
Emergency fund	\$350	\$250	\$225	\$200	\$175
Month	5	6	7	8	9
Balance of repair bill	\$170	\$120	\$70	\$20	\$0
Emergency fund	\$125	\$100	\$75	\$50	\$25

**Challenge Problem.** Answers will vary. Most would agree that they would pay the \$20 charge plus a donation, perhaps another \$20, and more, if possible, to support the school.

### Lesson 5: Gifts, Flowers, & Unexpected Trips

- $\frac{1}{12}$ ;

Paper,	Tape,	Glue,	Cookies,
$\frac{1}{2}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{12}$

- C \$20.56
- 3.75 more
- $(\$18 \times 10 + \$72.50 + \$59.50) \div 12 = \$26$

**Challenge Problem.** The advertised price is  $\frac{2}{3}$  the normal price. Overhead (building, sales clerks) may be less.

### Review

- \$182
- \$0; \$8.99 ( $\$8.99 + \$0$ ); \$8.99
- B \$150
- Delfino has  $\frac{1}{4}$  of his original money left afterwards. Diagram should show that what he has left is  $\frac{1}{4}$  of the whole.

## Unit 4: Credit Card Budgeting

### Lesson 1: How Credit Cards Work

- \$206.24
- \$342.24

Month	1	2	3	4	5	6	7	8	9
Payment	\$50	\$50	\$50	\$50	\$50	\$50	\$42.24	\$0	\$0
Amount owed	\$279.95	\$234.09	\$187.40	\$139.87	\$91.49	\$42.24	\$0	\$0	\$0

- A  $0.015 \times 12 \times \$1,000 = \$180$
- $(.014 \times \$1,500 \times 12) + \$40 = \$292$

**Unit 4 (continued)**

**Challenge Problem.** Below \$777.78 because (12.5% of  $x$ ) must be less than [(8% of  $x$ ) + \$35]

**Lesson 2: Percents**

- Either  $\frac{1}{4}$  (you complete the set and win 5 points) or 30% to open another set.
- C 62.5%

**Lesson 3: Paying by Credit Card**

- Yes, saves
  - About \$173.33 (depending on how you round)
- Unpaid balances:  
1: \$90; 2: \$181.35;  
3: \$274.07; 4: \$368.18;  
5: \$463.70; 6: \$560.66;  
7: \$659.07; 8: \$758.96;  
9: \$860.34; 10: \$963.24;  
11: \$1,067.69;  
12: \$1,173.70
  - Answers will vary. The key fact is that his debt increases unless he increases payments.
- D *MyCharge*; payment due in 50 days

**Challenge Problem.** Answers will vary. Key factors include the difference in the actual cost of reservations (\$290.78 by credit card versus \$325 with cash); ensuring you have a reservation; building a credit rating.

**Lesson 4: Credit Card Services**

- \$160
- \$12,000/year. Key points include the interest that Felicia pays on her unpaid balance (which increases what she really pays for the ticket) and the cost of buying a regular ticket. Compare this to what she pays for the ticket through her credit card.
- B \$87.60
- Draw a circle around \$25
  - Draw a square around \$600.

**Challenge Problem.** \$200

**Lesson 5: Reading the Fine Print!**

1.

Original Unpaid Balance	Late Payment Fee	Interest Owed	Payment	New Unpaid Balance
\$155	\$25	\$2.79	\$10	\$172.79

- Circle \$54 (for the month in which he goes over the limit and the following month when he is late).

3.

Balance	\$1,239.00	\$1,770.00	\$92.12
Transaction Fee	\$37.17	\$50	\$5

- C \$309

**Challenge Problem.** Answers will vary. Key factors include whether you minimize the interest you pay on any unpaid balance. Also whether you will use the services and how much each service will cost (when you include the annual fee and any other hidden costs of use).

**Review**

- $(\$245 - \$25) \times 1.019 = \$224.18$
- Unpaid balances:  
1: \$177.83; 2: \$156.19;  
3: \$134.08; 4: \$111.48;  
5: \$88.38; 6: \$64.77;  
7: \$40.64; 8: \$15.98; 9: \$0
- 9 months
  - saves; \$29.02
- B *Thistle*; payment due in 48 days
- $\$20,000/\$2,500 \times \$65 = \$520$
- 

Payment	Original Unpaid Balance	Payment received by closing date	Late Payment Fee	Interest Owed	New Balance after payment
On-time	\$247.50	Yes	\$0	\$3.10	\$150.60
Late	\$247.50	No	\$5	\$5.20	\$187.70

**Unit 5: Rental Budgeting**

**Lesson 1: Houses & Apartments**

- B \$27,279.00; \$568.31
- \$7,200; \$3,600; \$10,800; \$13,740; does not; \$2,940
- Diagram should show a rectangular shape with dimensions such as 5 feet by 10 feet
  - \$1.50

**Challenge Problem.**

3	4	5
9	6	3
1	3	0
8		

F = 4 or 5; N = 9; S = 6; O = 1; Z = 0; E = 8: The letter is the first letter of the word name for the number (as in, Four, Five, Nine, Six . . .).

**Lesson 2: Renting Wheels**

- $27.5 = x + 50y$  and  $40 = x + 100y$
- 24 Friday 2:59 p.m. Drop off minibus.
- D Saturday, Sunday
- About \$10

**Challenge Problem.** Answers will vary. Some key points might include the relative rental costs, the gas mileage, the ability of the two families to get along together in tight quarters.

**Lesson 3: Tools**

- 12
- C \$18.75
- 

Number of times per month that Hilde rents out the tent	Number of months before she starts making money
1	32.5
2	16.25
3	10.83
4	8.125

- Circle 3 times per month.

- Answers will vary. Key factors include his costs of \$205 and the deposit of \$285.

**Challenge Problem. 27**

# of painted surfaces on a small cube	0	1	2	3	4	5	6
# of cubes	1	6	12	8	0	0	0

**Lesson 4: Chain of Rentals**

- 5 hours — \$4 to match \$20; or 4 weeks — \$2,048 to match \$512

**Lesson 5: Renting to Buy**

- $(\$405 \times 24) + (\$452.59 \times 36) - \$20,499 = \$5,514.24$
- \$19,620; \$22,298.88; Answers will vary. Key points include availability



## Unit 5 (continued)

of money, relative cost of the two plans, paying sooner than later, ability to turn the car in at the end of the lease.

- C About  $3\frac{1}{2}$  years
- a. 500  
b. Diagram should show a steady increase to 9,500 stores after 5 more years.

**Challenge Problem.** Sample answer: 8, 7, 6, 5, 4, 3, 2, 1, 0, -1, -2, -3, etc. The value of ( $9 \times$  ninth term) in this sample answer is 0.

### Review

- a. \$625; \$687.50; \$756.25  
b. \$24,825.00; c. \$689.58
- \$0.10; \$35
- 7; Find the next greatest whole number greater than  $\frac{99}{15}$ .
- A \$6,201

## Unit 6: Self-Employment

### Lesson 1: Starting Out

- 1,350
- $\$45 \times \frac{200}{50}$  or \$180;  $\$79.50 + (\$12.99 \times \frac{2}{5})$  or \$84.70; \$95.30; Some possible assumptions are that she will be able to use the remaining ream of paper and the rest of the ink in the cartridges. There might be issues about the quality.
- B \$187.50
- 12.5

**Challenge Problem.** About \$318.50. Explanations should show 6% spread over 12 months ( $\frac{1}{2}\%$  per month), calculated each month on the monthly balance for 12 months.

### Lesson 2: Income versus Expenses

- a. \$0.20  
b.

Packet size	Sale price	Cost to make mix	Profit
8 ounces	\$3	\$2	\$1
12 ounces	\$4.50	\$2.20	\$2.30
16 ounces	\$6	\$2.40	\$3.60
20 ounces	\$7.50	\$2.60	\$4.90

c. Non-food expenses stay constant. A packet that is 50% larger uses 50% more ingredients.

- C probability; The probability of a customer picking one of Saharah's stands is  $\frac{2}{4}$  or  $\frac{1}{2}$ . The probability of that customers picking one of the others is  $\frac{1}{4}$ .
- About 25,755

**Challenge Problem.** 301. One way is to make a chart and look for a pattern. Sample expression:  $(n \times 2) + (n + 1)$

### Lesson 3: Insurance & Taxes

- A \$540
- $\$215 \times 12 \times 0.153 = \$394.74$
- a. \$50; b. \$3,050
- Circle center column (\$2,025, \$675, \$823.50).

**Challenge Problem.** 15. Reflect the figure over a horizontal line. Then add another row of dots to the base. The number of dots you add is equal to the position of the figure in the sequence.

### Lesson 4: Getting Loans

- \$258
- B 25%
- 

End of year	Installment	Interest
1	\$2,400	\$192
2	\$2,400	\$144
3	\$2,400	\$96
4	\$2,400	\$48
5	\$2,400	\$0

- a. \$787.50; \$141.75  
b. \$11,151

**Challenge Problem.** Some key factors include asking customers for money up front, shortening the time that you give your customers to pay, lengthening the time before you pay your vendors, building up a savings fund.

### Lesson 5: Making the Numbers Work

- Sample answer:  $24 \div 3 + 21 - (19 - 10)$

- Sample answer:  $(18 + 7) \div 5 \times 2 + 10$

### Review

- a. 110; b. \$1
- a. A \$0.20  
b.  $\$6 - (\$2.00 + \frac{1}{2} \times \frac{1}{5} \times \$2.00) = \$3.80$
- Circle row 1.
- C \$960

## Unit 7: Going on a Trip

### Lesson 1: Budget Impacts

- an increase in expenses of \$306.50 per month.
- A \$399.54
- Sample answer: about \$650 to \$700. Gas for car will be zero and utilities will be minimal. Rent, car payment, telephone, and cable TV will be the same. Food, clothes, and entertainment can be transferred to vacation costs.
- a. Shade 3 squares; b. \$36

**Challenge Problem.**  $(\$200 - \$46) \div \$7$ ;  $(\$200 - \$21.50) \div \$8.50$ ; 1 hour. You have to work 1 hour more.

### Lesson 2: Currency Translations

- B 20<sub>8</sub>
- Warren; Benton wrote 100<sub>5</sub> and translated that to 25<sub>10</sub>.

### Lesson 3: A Step to Your Future

- 50%
- a. 0  
b. 9 passenger should be marked on the number line.
- B 22.5 minutes
- Answers may vary but should add up to \$6.95.

**Challenge Problem.** 4007. The value of the  $n$ th odd number is  $2n - 1$ , where  $n$  represents the count of that odd number. So for 1,  $n = 1$ ; for 3,  $n = 2$ ; for 5,  $n = 3$ ; and so forth.

### Lesson 4: Renting What You Need

- \$225; Sample: She didn't want the bother of

## Unit 7 (continued)

carrying hers and the risk of possibly losing it.

2. D \$3,650
- 3.

Comparing choices	Fraction that shows the comparison	Amount of money that Beyonce saves
Choosing option i instead of option iii	$\frac{3}{4}$	\$105
Choosing option i instead of option ii	$\frac{21}{56}$	\$75
Choosing option ii instead of option iii	$\frac{13}{14}$	\$30

4. a. \$70
- b. Connect \$70 and \$0.

**Challenge Problem.** 21 girls and 18 boys

### Lesson 5: Going Abroad

1. \$198.90
2. \$167 to \$1,667
3. C a debit of \$610.50
4. a. Use the number of pounds (2.205) to one kilogram and convert units
- b. Correct equation to  $(145 \times \$9.07) + (70 \times \$9.07) = \$1,950.05$ .

**Challenge Problem.** 8. For example, use  $x$ ,  $y$ , and  $z$  for the three numbers. Write equations:  $\frac{x}{y} = \frac{3}{4}$ ;  $\frac{y}{z} = \frac{2}{5}$ ;  $x + y + z = 34$ . Solve for  $y$ .

### Review

1.  $(\$635 + \$152 + \$500) \div 12$ . The effect is an increase in expenses of \$107.25 per month.
2. Diagram shows that Arlan saves 80% of the cost of a repeat trip. An example diagram can be a circle graph in which the cost of the voucher, \$200, is 80% of the cost of the \$250 ticket.
3. Shade one quarter of the circle.  $[(\$106 + \$18) - (46.50 \times 2)] \div (\$106 + \$18) = \frac{1}{4}$
4. B £307.28
5.  $70 \times \$9.07 = \$634.90$

## Unit 8: Keeping the Books

### Lesson 1: Keeping Records

1. a. \$5,108
- b. \$1,617
- c. income, expenses, \$3,491
2. \$1,881

3. Answers will vary. A key factor is the difference between the cost of the project at \$15 per hour (\$1,537.50) and the offer of \$1,200.

4. Advantages: Save money on interest payments. Simplify record keeping. Disadvantages: The rate may rise to a very high rate after 12 months. You may need a second card if you get close to exceeding the limit on one card.

**Challenge Problem.** 51. Some possible methods include test and check, write an equation, or others. For example,  $10d + 5n = 7.85$ , which simplifies to  $2d + n = 157$ ;  $d > n$ ;  $n$  is an odd number. If  $n$  were equal to  $d$ , then  $3d$  would equal 157, and  $d$  might be about 53 and  $n$  would then be about 51.

### Lesson 2: Club Records

1. underestimated; \$124

Ski Trip Finances	Estimated cost	Actual cost	Variance
Hotel	\$2,160	\$2,135	\$25
Transportation	\$2,413	\$2,567	-\$154
Ski tickets	\$2,100	\$2,400	-\$300
Food	\$850	\$545	\$305

2. C 10
3. Shade sector A and label it 20%
4.  $(\$238.00 - \$117.60) \div \$238.00 \times 100\% = 50.59\%$

**Challenge Problem.**

	24	15	2
9	3	3	1
10	2	5	1
8	4	1	2

### Lesson 3: Bingo Books

1. Lance
2. C 6

### Lesson 4: Big Events

1. \$2,915; \$1,700; make
2. a.  $(0.05 \times \$15 \times 50) - (0.1 \times \$25 \times 32)$
- b. The event will make \$42.50 less.
3. A Income: \$3,360; expenses: \$1,250
4. a. \$21; b. \$4,695

**Challenge Problem.** Key points to consider include the book-keeping and managing the income and expenses for the event as a whole, coordinating dates and times, sharing responsibility, and reducing confusion.

### Lesson 5: Spreadsheets & Software

1. a.

Total	\$1,550	\$1,450	\$1,625	\$4,625
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- b. \$4,625; does; These are two different ways of adding the same information.
2. C *Finances First*
3. 123 choose basketball; 77 choose softball; 64 choose robotics; 30 choose chess; 47 choose debate; 85 choose band

**Challenge Problem.** Some key advantages are speed, accuracy, and the ability to manipulate and present the data in different visual forms. Also, it is easy to add or change data and see the new results quickly. One disadvantage is the possible problem that can arise from rounding in translating numbers to percents and the other way around.

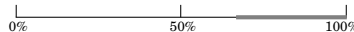
### Review

1.  $\$1,714 + \$250 + \$165 + \$968 = \$3,115$ ;  
 $\$1,092 + \$623 = \$1,715$
- 2.

	Estimated cost	Actual cost	Variance
Hotel	\$1,675	\$1,654	\$21
Transportation	\$125	\$134	(\$9)
Entrance tickets	\$160	\$140	\$20
Food	\$360	\$382	(\$22)

overestimated

3. a.  $\$116 \div \$358 \times 100\% = 32.4\%$
- b. Highlight  $\frac{1}{3}$  of the line (from 66% to 100%).
4. does



5. \$2,150