verbal math lesson

LEVEL 2 FOR CHILDREN AGES 4 TO 7

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When a ball Bounces off of a wall, When you cook From a recipe book, When you know How much money you owe, That's mathematics! When you choose How much postage to use, When you know What's the chance it will snow, When you bet And you end up in debt, Oh try as you may, You just can't get away From mathematics! - That's Mathematics!

TOM LEHRER

INTRODUCTION

Verbal math, also called mental math, is a practical and time-honored method of solving mathematical problems. Math done with worksheets often slows children down. Shortcuts and computational tricks learned by doing math mentally allow children to bypass much of the tediousness they experience with written math.



The word problems in each lesson concentrate on one main concept so that the child can discover and apply the hidden mathematical pattern. The problems vary within each lesson to keep the child on his or her "mental toes" during the lesson. The language of the problems is kept at the level of a young child In this volume we teach addition and subtraction up to one-hundred and introduce multiplication and division. As in Verbal Math Lesson Book 1, no paper or pencil is needed. All the problems in this book are designed to be read to your child so they can be done verbally. This book is intended for the parent or teacher and not to be handed to the child. The answers are there because, well, adults are not as speedy as kids at math!

The Verbal Math Lesson should be done as a fun activity. You can do a few problems as time permits. Or you can create a daily program of about 10-15 minutes each day. It is not intended to replace school work or a more comprehensive math program.

We teach a different sequence of math operations than those used in school work. In Verbal Math we teach addition and subtraction along with multiplication and division simultaneously to demonstrate the reversibility of both practices. Objects or pictures are unnecessary for this course. However, from time to time you may need to illustrate a point by using objects or images. The decision to use these helpers is left to the parent. Many word problems in the Verbal Math Lesson books are accompanied by solutions. These solutions allow you to talk the child through new or harder problems and teach him or her how to think procedurally. The given solution should serve as a model for similar problems if your child asks for help. There are twenty nine lessons in this book. Some children can do a lesson a week. For others, it might take longer. Sometimes repeating the lesson would be necessary before proceeding further. Just make sure that your child can do all the problems, and we mean all, correctly and speedily before going to the next lesson. You know your child better than anyone else. Trust your parental judgment and go as fast as your child allows. Although we suggest an age group for these books, these are just guidelines.

We hope you will contact us with your experience with this series and any suggestions for improvements and corrections.

Best of luck, Michael Levin and Charan Langton

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OPERATIONS WITH 2-DIGIT NUMBERS

PLACE VALUE

Let's learn place values:

Place value has to do with the place of a digit in a number. In number 62, for example, 6 is in the tens place. This is the second place counting from the right side of the number. It means that we have six 10s in this number. 2 is in the ones place which is always the right most place at the end of the number. This means that this number has 2 ones. If we write this out, the number 62 is the sum of 6, 10s and 2, 1s.

62 = 10 + 10 + 10 + 10 + 10 + 10 + 1 + 1

In a three-digit number, like 108, 1 is in hundreds place, zero is in tens, and 8 is in ones. So the number 108 is the sum of 1 100's and 8, 1s.

108 = 100 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1

Tell me:

- In the number 29, in what place is 9? **Ans:** In the ones place.
- In the number 30, in what place is 0? **Ans:** In the ones place.

- In the number 81, in what place is 8? **Ans:** In the tens place.
- In the number 50, in what place is 5? **Ans:** In the tens place.
- In the number 109, in what place is 9? **Ans:** In the ones place.
- In the number 234, in what place is 3? **Ans:** In the tens place.
- In the number 234, in what place is 2? **Ans:** In the hundreds place.
- In the number 100, in what place is 1? **Ans:** In the hundreds place.
- In the number 341, in what place is 1? **Ans:** In the ones place.
- In the number 341, in what place is 4? **Ans:** In the tens place.

EXERCISE I

Addition Review: What is the sum or difference of the given numbers (in front of the equal sign) in these problems? Please do problems along columns.

33 + 11 = 44	23 + 27 = 50	35 + 45 = 80	22 + 30 = 52
42 + 15 = 57	19 + 11 = 30	42 + 48 = 90	31 + 29 = 60
45 + 15 = 60	21 + 32 = 53	33 + 66 = 99	30 + 50 = 80
46 + 24 = 70	22 + 33 = 55	34 + 36 - 70	
32 + 23 = 55	12 + 27 = 39	54 + 50 = 70	
34 + 26 = 60	25 + 35 = 60	53 + 36 = 89	
EXERCISE II			
25 - 11 = 14	67 - 27 = 40	65 - 45 = 20	55 - 34 = 21
25 - 11 = 14 20 - 7 = 13	67 - 27 = 40 40 - 11 = 29	65 - 45 = 20 45 - 13 = 32	55 - 34 = 21 47 - 30 = 17
25 - 11 = 14 20 - 7 = 13 20 - 8 = 12	67 - 27 = 40 40 - 11 = 29 50 - 30 = 20	65 - 45 = 20 45 - 13 = 32 35 - 25 = 10	55 - 34 = 21 47 - 30 = 17 57 - 15 = 42
25 - 11 = 14 20 - 7 = 13 20 - 8 = 12 30 - 24 = 6	67 - 27 = 40 40 - 11 = 29 50 - 30 = 20 70 - 40 = 30	65 - 45 = 20 45 - 13 = 32 35 - 25 = 10 75 - 24 = 51	55 - 34 = 21 47 - 30 = 17 57 - 15 = 42 66 - 15 = 51
25 - 11 = 14 20 - 7 = 13 20 - 8 = 12 30 - 24 = 6 40 - 20 = 20	67 - 27 = 40 40 - 11 = 29 50 - 30 = 20 70 - 40 = 30 45 - 25 = 20	65 - 45 = 20 45 - 13 = 32 35 - 25 = 10 75 - 24 = 51 45 - 25 = 20	55 - 34 = 21 47 - 30 = 17 57 - 15 = 42 66 - 15 = 51 57 - 16 = 41

WORD PROBLEMS

50 - 20 = 30

 A redwood tree is 80 feet tall and a fir tree is 60 feet tall. How much is the redwood tree taller than the fir tree? Ans: 20 feet.

55 - 35 = 20 48 - 35 = 13 45 - 21 = 24

 A redwood tree is 80 feet tall and a birch tree is 30 feet tall. How much is the redwood tree taller than the birch tree? Ans: 50 feet.

- 3. A redwood tree is 40 feet tall and a fir tree is 30 feet tall. What is the height of the two trees together? **Ans:** 70 feet.
- 4. A redwood tree is 80 feet tall, a fir tree is 60 feet tall. By how much is the redwood tree taller than the fir tree? **Ans:** 20 feet.
- 5. Nancy paid \$40 for groceries and has \$60 left. How much money did she have before buying the groceries? **Ans:** \$100.
- Mina paid for \$40 of groceries with a \$50 bill. How much did she get in change? Ans: \$10.
- A carpenter opened a box which had 100 nails in it. He used 20 nails the first day and 30 the next day. How many nails are left in the box? *Ans:* 50 nails (100 20 = 80, then 80 30 = 50).
- A plumber connected together three 20-foot pipes and then cut 10 feet from the end of the new pipe. How long is the new pipe? *Ans:* 50 feet (20 + 20 + 20 = 60; then 60 10 = 50).
- An electrician spliced (joined together) a 30-foot wire and a 50-foot wire. How long is the new wire? **Ans:** 80 feet.
- A roofer used 40 shingles on one side of the roof and 60 shingles on the other side. How many shingles did he use?
 Ans: 100 shingles.
- A cable installer used 70 feet of cable from the street to the house and another 30 feet inside the house. How much cable did he use? *Ans:* 100 feet.
- A butcher wrapped 20 ounces of beef and 70 ounces of lamb. How much meat did he wrap? *Ans:* 90 ounces.
- A baker baked 50 cakes and 50 pies. How many of cakes and pies did she bake? *Ans:* 100 cakes and pies.
- 14. A cook pickled 40 cucumbers and 40 tomatoes. How many veggies did he pickle? **Ans:** 80 veggies.
- Robert brought 2 checks to the bank, one for \$30 and the other for \$50. How much were both checks? *Ans:* \$80.

- A famous writer received 90 letters and wrote back 40. How many letters are waiting for his reply? *Ans:* 50 letters.
- 17. An absent-minded professor bought 40 pairs of glasses. He lost 20 pairs and broke 10. How many pairs of glasses are left for him break or lose? *Ans:* 10 pairs of glasses. *Solution:* 40 (pairs) 20 (lost) = 20 pairs, then 20 (pairs) 10 (broken) = 10 pairs left. The other way to solve this problem would be: 20 (lost) + 10 (broken) = 30 (lost and broken), then 40 (pairs) 30 = 10 pairs.
- 18. There are 30 students on the tennis team and 40 students on the wrestling team.

a) How many students are on both teams? **Ans:** 70 students.

b) How many more students are on the wrestling team than on the tennis team? **Ans:** 10 more students.

19. The city hall building is 70 years old, the concert hall is 30 years old, and the school is 20 years old.

a) By how much is the city hall older than the concert hall? *Ans:* 40 years.

b) By how much is the city hall older than the school? **Ans:** 50 years.

c) By how much is the concert hall older than the school? **Ans:** 10 years.

- Mr. Handel can handle 30 candles. Mrs. Handel can handle 40 candles. How many candles can the two Handels handle?
 Ans: 70 candles.
- 21. There are 60 students, 20 teachers, and 10 custodians in a small school.

a) How many people are in the school?

Ans: 90 people (60 + 20 + 10 = 90).

b) How many students and teachers are in the school?

Ans: 80 students and teachers.

c) How many more students are in the school than teachers? **Ans:** 40 more students.

d) How many more students are in the school than teachers and custodians? *Ans:* 30 more students.

Solution: 20 (teachers) + 10 (custodians) = 30 people. Then, 60 (students) - 30 (teachers and custodians together) = 30 people.

- Monday, Kirby read for 33 minutes. Tuesday, he read for 30 minutes. How many minutes did Kirby read on Monday and Tuesday? *Ans:* 63 minutes.
- Lu shot 40 paint balls, Mia shot 44. How many paint balls did they both shoot? *Ans:* 84 paint balls.
- 24. Mia shot 21 paint balls out of the 41 she had. How many paint balls does she have left? **Ans:** 20 paint balls.
- Before starting her training Ann could lift 40 pounds. Now she lifts 70 pounds. How many pounds more can Ann lift now?
 Ans: 30 pounds more.
- Before training Ann weighed 80 pounds. Now she weighs 95 pounds. How many pounds did she gain? Ans: 15 pounds.
- On a school trip to Florida, Pablo took 45 pictures of flamingos and 30 pictures of other kinds of birds. How many pictures of birds did he take? *Ans:* 75 pictures.
- On the same trip, Mariana took 86 pictures. If she took 30 pictures of birds, how many other pictures did she take?
 Ans: 56 pictures.
- 29. An adult alligator has 80 teeth, a young alligator may have 40. How many more teeth does an adult alligator have?Ans: 40 teeth more.
- 30. The alligator in the zoo is 50 years old. How many more years might it live if a typical alligator can live up to 80 years?Ans: 30 years more.
- 31. For the 4th of July celebration we bought 85 red, white and blue balloons.

a) How many blue balloons did we buy if there are 50 red and white balloons? *Ans:* 35 blue balloons.

b) How many red balloons are there if white and blue balloons together make 60 balloons? **Ans:** 25 red balloons.

- Carlos cut 53 stars and 40 circles from a gold poster board. How many figures did he cut out? *Ans:* 93 figures.
- Carlos then cut 43 circles and 20 squares from a red poster board. How many figures did he cut now? Ans: 63 figures.
- Mr. Wolff has a farm with 60 sheep and 28 pigs. How many animals are on Mr. Wolff's farm? Ans: 88 animals.
- Mrs. Fox also has a farm with 47 rabbits and 50 chickens.
 How many animals are on Mrs. Fox's farm? *Ans:* 97 animals.
- Sylvia and Lydia together have 98 quiz cards. How many cards does Sylvia have if Lydia has 60? Ans: 38 cards.
- Two islands together have 83 trees. How many trees does the second island have if the first has 70 trees? Ans: 13 trees.
- Ten years later, the second island that had 13 trees now has 53 trees. How many new trees grew on the island? Ans: 40 trees.
- Two dogs together have 74 fleas. How many fleas does the second dog have, if the first dog has 30 flees? Ans: 44 fleas.
- 40. The second dog with the 44 fleas was washed by his owner and 30 fleas were washed off. How many fleas does he have left?Ans: 14 fleas.
- The first puzzle has 30 pieces more than the second. How many pieces are in both puzzles if the second has 20 pieces?
 Ans: 70 pieces.

Solution: The second puzzle has 20 pieces, the first puzzle has 20 + 30 = 50 (pieces). Both puzzles have 20 (in the first) + 50 (in the second) = 70 pieces.

- 42. Raj has \$60 dollars. Sanjay has \$40 dollars less. How much money do they have together? *Ans:* \$80.
 Solution: Sanjay has \$60 \$40 = \$20. Both guys have \$60 (Raj) + \$20 (Sanjay) = \$80 (together).
- 43. Fifty paintings were shown on the first day of a two-day art show, but 20 less paintings were shown the second day. How many paintings were shown the second day? *Ans:* 30 paintings.

- 44. An agent sold 40 tickets to a play, 30 tickets to a concert, and 20 tickets to a lecture. How many tickets did she sell?Ans: 90 tickets.
- 45. They are building a 70-story office building. So far they have built 30 floors. How many floors are left to build? **Ans:** 40 floors.
- 46. All of a sudden 100 yellow-jackets (wasps) appeared on Peter's patio; 40 of them came near enough to bite Peter. How many didn't come near? *Ans:* 60 yellow-jackets.
- 47. A baker made 30 cupcakes, 50 English muffins, and 60 scones.
 a) How many more scones than muffins did he make?
 Ans: 10 more.
 b) How many cupcakes and muffins did he bake?
 Ans: 80 altogether.
 c) How many cupcakes and scones were baked?
 Ans: 90 altogether.
- 48. Joe worked 30 hours the first week and 50 hours the second week.
 a) How many more hours did Joe work the second week?
 Ans: 20 more hours.
 b) How many hours did Joe work in the two weeks?
 Ans: 80 hours.
- 49. Anna has 11 dolls and Lydia has 3 more than Anna. How many dolls does Lydia have? **Ans:** 14 dolls.
- 50. Jackie's pre-school class has 20 children. Her Kindergarten class has 10 children more. How many children are in Jackie's kindergarten class? **Ans:** 30 children.

2

ADDING SINGLE-DIGIT NUMBERS TO DOUBLE-DIGIT NUMBERS

COUNTING

- Count aloud as fast as you can for 1 minute (by the clock). See how far you can count.
- Using a stopwatch (or looking at the second hand of a clock) count aloud as fast as you can by 10s (10, 20, 30, etc.). Check how long it took you and then ask you parent or teacher to match your time.
- Count from 1 to 50 skipping every other number (1, 3, 5, 7, 9, 11, etc.)
- Count from 0 to 50 skipping every other number (0, 2, 4, 6, 8, 10, etc.)

EXERCISE I

Let's compare double-digit numbers:

- Which number is larger, 54 or 45? **Ans:** 54
- Which number is smaller, 34 or 43? **Ans:** 34

- Which number is larger, 67 or 76? **Ans:** 76
- Which number is larger, 65 or 56? Ans: 65
- Which number is smaller, 78 or 87? **Ans:** 78
- Which number is larger, 89 or 98? **Ans:** 98
- Which number is smaller, 23 or 32? Ans: 23

Let's count:

- Count from 52 to 64 by adding 3 (i.e., 52, 55, 58, 61, 64).
- Count from 44 to 64 by adding 3 (i.e., 44, 47, 50, 53, 56, 59, 62, 65).
- Count from 71 to 91 by adding 4 (i.e., 71, 75, 79, 83, 87, 91).
- Count from 63 to 83 by adding 4 (i.e., 63, 67, 71, 75, 79, 83).
- Count from 41 to 66 by adding 5 (i.e., 41, 46, 51, 56, 61, 66).
- Count from 43 to 73 by adding 5 (i.e., 43, 48, 53, 58, 63, 68, 73).
- Count from 44 to 69 by adding 5 (i.e., 44, 49, 54, 59, 64, 69).
- Count from 30 to 60 by adding 6 (i.e., 30, 36, 42, 48, 54, 60).

EXERCISE II

22 + 6 = 28	42 - 7 = 35	38 + 8 = 46	70 - 24 = 46
37 - 17 = 20	44 + 6 = 50	56 - 9 = 47	45 + 25 = 70
30 + 6 = 36	45 - 7 = 38	21 + 8 = 29	
32 - 7 = 25	32 + 6 = 38	22 - 9 = 13	
33 + 3 = 36	30 - 7 = 23	34 + 7 = 41	

HOW TO SOLVE

First Problem: 48 + 5 = ?

Solution: Step 1: For number 48, it would take 2 to make it 50. We split 5 into 2 + 3.

Step 2: 48 + 2 = 50; then, 50 + 3 = 53.

The answer: 48 + 5 = 53.

Second Problem: 83 + 7 = ?

Solution: Seven does not need to be split to make to the nearest 10.

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Third Problem: 73 + 8 = ?
Solution: Step 1: 8 splits into 7 + 1.
 Step 2: 73 + 7 = 80; then, 80 + 1 = 81.
The answer: 73 + 8 = 81.
Fourth Problem: 89 + 5 = ?
Solution: Step 1: 5 splits into 1 + 4.
 Step 2: 89 + 1 = 90, them 90 + 4 = 94.
The answer: 89 + 5 = 94.

TRICKS

Sometimes we need to learn tricks to help us solve math problems. Let's start with the simple trick of adding 9 to a number or adding a double-digit number to 9. We know that it is easier to add 10 and then take 1 away from a number. So we will use this idea.

45 + 9 = ?We can pretend that we add 10 to 45 instead of 9, 45 + 10 = 55. But we added 1 to 9, now we have to take it back: 55 - 1 = 54. Then: 45 + 9 = 54.

9 + 73 = ? We can use the same trick of turning 9 into 10 by adding 1, 10 + 73 = 83. Let's not forget to take back 1, 83 - 1 = 82. Then: 9 + 73 = 82.

EXERCISE III

22 + 6 = 28	42 + 6 = 48	38 + 7 = 45	70 + 17 = 87
37 + 7 = 44	44 + 8 = 52	56 + 8 = 64	45 + 18 = 63
30 + 8 = 38	45 + 7 = 52	21 + 7 = 28	48 + 19 = 67
32 + 9 = 41	32 + 6 = 38	22 + 6 = 28	52 + 16 = 68
33 + 7 = 40	30 + 8 = 38	34 + 16 = 50	47 + 17 = 64

WORD PROBLEMS

 An explorer found 57 islands, and then he found 9 more. How many islands did he discover? **Ans:** 66 islands.

- 2. My grandpa is 58 years old.
 - a) How old is he going to be in 4 years? **Ans:** 62 years old.
 - b) How old is he going to be in 5 years? **Ans:** 63 years old.
 - c) How old is he going to be in 7 years? **Ans:** 65 years old.
 - d) How old is he going to be in 9 years? **Ans:** 67 years old.
- 3. My grandma is 52 years old.
 - a) How old was she 4 years ago? **Ans:** 48 years old.
 - b) How old was she 5 years ago? **Ans:** 47 years old.
 - c) How old was she 7 years ago? **Ans:** 45 years old.
 - d) How old was she 9 years ago? **Ans:** 43 years old.
- On a construction site, 8 workers were joined by 46 new ones. How many workers are on the site now? *Ans:* 54 workers.
- The construction site had 56 workers, then 6 more were hired. How many workers are now at the site? Ans: 62 workers.
- It is 67 miles to the last town and 8 more miles to the village. How many miles are there between the town and the village? Ans: 75 miles.
- There were 56 cars on the parking lot, then 9 more cars came and parked. How many cars are there now in the parking lot? *Ans:* 65 cars.
- 8. A collector had 88 pins and bought 8 more. How many pins does she have now? **Ans:** 96 pins.
- This summer, we bought 24 movie tickets and 9 concert tickets. How many tickets did we buy? Ans: 33 tickets.
- The movie tickets for my mom and dad cost \$18. My ticket cost
 \$6. How much did all three tickets cost? **Ans:** \$24.
- We had three movie tickets that cost \$24. Then my grandmother decided to come to the movie with us. If her ticket cost \$7, how much money did we spend on all 4 tickets? *Ans:* \$31.
- The first game took 46 minutes; the second was 7 minutes longer. How long did the second game last? Ans: 53 minutes.
- 13. Think about a double-digit number less than 50. Add 3 to your number. Then add 6. Take away 9. You are back to your number!

14. A painter has 3 basic colors but can mix 88 more from the 3 basic colors. How many different colors can he have?
Ans: 92 colors.
The basic colors are red, blue, and yellow. You can make all other colors by mixing these. For example: green color comes from mixing blue and yellow, orange color comes from mixing red

and yellow, purple comes from mixing red and blue, and so on.

- 15. There were 58 patients in a hospital,
 a) After 5 new patients were admitted today, how many patients are in the hospital? *Ans:* 63 patients.
 b) Then 9 more were admitted. How many patients are in the hospital now? *Ans:* 72 patients.
 c) Then 8 more patients came. How many are there now? *Ans:* 80 patients.
- Two pumps filled a gas tank. If the first pump pumped 8 gallons and the second pumped 25 gallons, how many gallons did both pumps pump? *Ans:* 33 gallons.
- A far away sun has 7 planets and 17 asteroids. How many planets and asteroids are flying around that sun? *Ans:* 24 planets and asteroids.
- A train was first delayed 45 minutes and then again for 8 more minutes. How long was the train delayed? Ans: 53 minutes.
- 19. Morris had 86 coins in his collection and then he purchased 9 more. How many coins are in his collection now? **Ans:** 95 coins. Did you know that the person who collects coins is called a numismatist?
- If the sum of two numbers is 80 and one of the numbers is 8, what is the other number? *Ans:* 72.
- Laura and Maya were jumping rope. Laura jumped 65 times and Maya jumped 8 times. How many times did they both jump? *Ans:* 73 times.
- Peter and Ross are throwing snowballs. Peter threw 7 snowballs and Ross threw 88. How many snowballs did they both throw? *Ans:* 95 snowballs.

- During the election, 45 candidates visited our town in September, but only 6 candidates in October. How candidates visited our town in those two months? *Ans:* 51 candidates.
- It costs \$47 to replace a broken door and \$9 for a new lock. How much is the total cost of replacing the door? *Ans:* \$56 dollars.
- 25. There are 26 letter keys and 10 number keys on the keyboard. How many letter and number keys altogether are on the keyboard? **Ans:** 36 keys.
- 26. There were 52 magazines in the library and they subscribed to 9 more magazines. How many magazines does the library get now? *Ans:* 61 magazines. To subscribe to a magazine means to buy it so you get it

regularly every month in the mail from the publisher.

- In previous vacations we traveled through 24 states. This summer we plan to see 6 more. How many states will we have seen by the end of this summer? *Ans:* 30 states.
- There were 33 explorers in the group before 7 new scouts joined in. How many people are in the group now? *Ans:* 40 people.
- 29. It takes Lloyd 26 minutes to clean his room. It takes his brother5 minutes longer to clean his. How long does it take Lloyd's brother to clean his room? *Ans:* 31 minutes.
- One story is 57 pages long. The other story is 9 pages longer. How many pages are in the other story? *Ans:* 66 pages.
- It takes 74 days to build a barn and 7 more days to paint it. How long does it take for the whole work? *Ans:* 81 days.
- A man planned to drive 57 miles to his friend's house but got lost and had to drive around for 6 extra miles. How many miles did he travel? *Ans:* 63 miles.
- 33. A printer weighs 68 pounds and the paper inside weighs 5 lbs. How much do the printer and the paper weigh together?Ans: 73 pounds.

- Mr. Walker paid \$28 for a dinner and left a \$5 tip. How much did he pay altogether? Ans: \$33.
- Sally sells seashells by the seashore. She had 54 seashells and sold 8 of them. How many more seashells does she have to sell? *Ans:* 46 seashells.
- 36. An aspiring actress took 37 dancing lessons and 7 singing lessons. How many lessons did she take? Ans: 44 lessons. Aspiring means hoping and preparing for something desired.
- 37. Not counting the 6 pigeons, there are 47 birds in the park. How many birds are there if you count the pigeons? Ans: 53 birds.
- It was 65 degrees at night and in the morning the temperature went up 7 degrees. What was the temperature in the morning? *Ans:* 72 degrees.
- 39. A truck drove 25 miles per hour on a town road, and 9 mph faster on a country road. What was the truck's speed on the country road? *Ans:* 34 mph.
- 40. A gardener counted 37 gopher holes and then noticed 9 more. How many gopher holes did the gardener see?Ans: 46 gophers. Is the gardener happy?
- 41. Teresa had \$77 in the bank and added \$6 more. How much money does she have now? **Ans:** \$83.
- 42. A professor gave 38 lectures in her country and 8 lectures abroad. How many lectures did she give? **Ans:** 46 lectures. Abroad means a foreign country.
- 43. After a group dance 8 main actors left the stage, but 38 dancers stayed on. How many actors and dancers were there at the start? **Ans:** 46.
- 44. Carlos could lift 44 pounds last year. This year he can lift 7 pounds more. How many pounds can he lift now? *Ans:* 51 lbs.
- 45. It took Nan 27 minutes to download 14 of her songs and 8 more minutes to download 5 more songs. How long did it take her to download all the songs? *Ans:* 35 minutes. *Solution:* The reason this problem might be a challenge is because it has numbers that have nothing to do with the

answer. The question does not ask for the number of songs, though this information is in the problem, but asks only for the amount of time it took to download them. We can make it simpler by paying attention only to the time spent, that is, it took 27 minutes and then, 8 more minutes. Then the problem becomes 27 + 8 = 35 minutes.

- 46. I saw 25 apples in 5 baskets and 9 oranges in 3 baskets. How many baskets did I see? **Ans:** 8 baskets. Did you do it right? Bravo! if you did!
- 47. There are 74 pages in the first 6 chapters of the book and 8 pages in the 7th chapter. How many pages are in all seven chapters? **Ans:** 82 pages. **Solution:** 74 pages + 8 pages (in the seventh chapter) = 82 pages.

48. 16 zebras have 48 legs and 4 pelicans have 8 legs.
a) How many zebras and pelicans are in the zoo?
Ans: 20 zebras and pelicans.
b) How many legs do all zebras and pelicans have?
Ans: 56 legs.

- 49. Lee counted 44 sides on 11 squares and 9 sides on 3 triangles.
 a) How many sides did Lee count? *Ans:* 53 sides.
 b) How many squares and triangles were there? *Ans:* 14 squares and triangles.
- Jessica bought 26 cupcakes for her friends. Then she remembered to buy cupcakes for her family and bought 9 more. How many did she buy in all? *Ans:* 35 cupcakes.
- 51. Last week Sevi gave 11 gold stars to Shawn because he was such a good boy. This week he got 7 more gold stars. Shawn needs 20 stars to get a prize. How many more gold stars does he need to get his prize? **Ans:** Only 2 more stars to go.
- 52. Shawn has 13 silver stars so far but needs 20. How many stars does he need to get a silver star prize? **Ans:** 7 more stars to go.
- 53. Bindi did 24 problems from the lesson so far. She still has11 more problems left to do. How many problems are in thelesson? *Ans:* 35 lbs.

3

SUBTRACTING SINGLE-DIGIT NUMBERS FROM DOUBLE-DIGIT NUMBERS

SKIP COUNTING

- Count from 60 to 100, skipping every other number (i.e., 60, 62, 64, 66, 68, 70)
- Count from 51 to 99 skipping every other number (i.e., 51, 53, 55, 57, 59, 61)
- Count from 70 down to 40 skipping every other number (i.e., 70, 68, 66, 64, 62, 60).
- Count from 81 down to 59 skipping every other number (i.e., 81, 79, 77, 75, 73, 71).

EXERCISE I

56 - 6 = 50	82 - 7 = 75	71 - 9 = 62	45 - 7 = 38
37 - 7 = 30	45 - 8 = 37	42 - 3 = 39	62 - 8 = 54
45 - 8 = 37	76 - 9 = 67	63 - 6 = 57	
67 - 9 = 58	36 - 4 = 32	64 - 9 = 55	
33 - 3 = 30	39 - 5 = 34	58 - 6 = 52	
57 - 6 = 51	41 - 8 = 33	91 - 5 = 86	