Math 5

MENTAL MATH

Map Mysteries

The Good and the Beautiful
CURRICULUM

About This Book

This mental math book correlates with the *Simply Good and Beautiful Math 5 Course Book*, which directs the child to do a lesson box in this mental math book for each lesson (except for lessons that are assessments).

To complete the mental math, the parent or teacher should hold up the book so that the child sees the Questions page and the parent or teacher sees the Answer Key page (or it can be laid flat with the parent or teacher covering the answers with a paper or sticky note). The child should then complete the lesson box number that correlates to his or her lesson in the *Simply Good and Beautiful Math 5 Course Book*, giving the answers aloud. As the child gives the answers, the parent or teacher checks the answers and provides any correction needed. Upon completion of the lesson box, both the parent/teacher and student should place a check mark in the box to mark it as completed.

At the end of each page of four or five lesson boxes, the student is directed to place a sticker from page 77 onto a designated space on the map on page 76. At the end of the course, the student will have a completed picture of the map, and as a reward for completing the course, the child is then able to read the "You-Choose" book included in the course: *Ivy and the Ice Village*. The map that the child creates shows places included in the book.

Students who struggle with a mental math concept should be encouraged to continue through the lesson boxes as several skills will be repeated throughout the book.

Each mental math lesson box is designed to take less than five minutes to complete.

It is most desirable for mental math to be done without the aid of writing anything down. However, if needed, the child may use paper and pencil to help with the problems, with the goal of discontinuing the use of the paper and pencil at some point in the book.

The mental math lesson boxes do not correlate directly with the lessons taught in the *Simply Good and Beautiful Math 5 Course Book*.



QUESTIONS

LESSON 1

COMPLETE

Skip Count

- by 6s from 6 to 72
- by 9s from 9 to 108

Add 100,000 to a Number

Increase the digit in the one hundred thousands place by 1. Regroup if needed.

525,525 800,900 1,688,999 1,452,234

Calendar

- A decade is 10 years. If it is 2019, what year will it be 3 decades from now?
- If it is 1846, what year was it 2½ decades ago?

LESSON 2

COMPLETE

Calendar

- A century is 100 years. If it is 1782, what year was it 2 centuries ago?
- If it is 2005, what year will it be 4 centuries from now?
- If it is 1888, what year was it ½ a century ago?

Elapsed Time

State how much time has passed.

5:10 PM to 6:35 PM 12:05 PM to 1:45 PM 8:15 AM to 9:35 AM

Subtract Money Amounts

$8.10 − $2.10 $7.00 − $4.75 $12.00 − $10.02

LESSON 3

COMPLETE

Roman Numerals

State the number for each Roman numeral.

IX XXXVI LXIX XVI XC

Add Money Amounts

$7.25 + $4.10 $3.75 + $5.50 $8.35 + $6.65

LESSON 4

COMPLETE

Fractions

What is ½ of 36? What is ⅓ of 27?

Calendar

State the month for each ordinal position of months in a year.

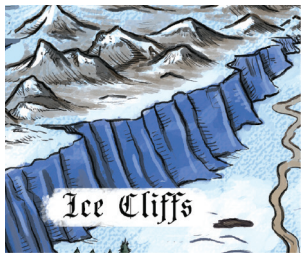
3rd 7th 12th 8th 6th

10th 2nd 4th 11th 5th

Money

How many nickels are in $1.10? How many quarters are in $4.00?

After completing Lesson 4, place this piece onto your map on C-4.



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ANSWER KEY

LESSON 1

COMPLETE

Skip Count

- by 6s from 6 to 72 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72
- by 9s from 9 to 108 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108

Add 100,000 to a Number

Increase the digit in the one hundred thousands place by 1. Regroup if needed.

525,525 625,525 | 800,900 900,900 | 1,688,999 1,788,999 | 1,452,234 1,552,234

Calendar

- A decade is 10 years. If it is 2019, what year will it be 3 decades from now? 2049
- If it is 1846, what year was it 2½ decades ago? 1821

LESSON 2

COMPLETE

Calendar

- A century is 100 years. If it is 1782, what year was it 2 centuries ago? 1582
- If it is 2005, what year will it be 4 centuries from now? 2405
- If it is 1888, what year was it ½ a century ago? 1838

Elapsed Time

State how much time has passed.

5:10 PM to 6:35 PM 1 hour 25 minutes | 12:05 PM to 1:45 PM 1 hour 40 minutes | 8:15 AM to 9:35 AM 1 hour 20 minutes

Subtract Money Amounts

$8.10 − $2.10 $6.00 | $7.00 − $4.75 $2.25 | $12.00 − $1.98

LESSON 3

COMPLETE

Roman Numerals

State the number for each Roman numeral.

IX 9 XXXVI 36 LXIX 69 XVI 16 XC 90

Add Money Amounts

$7.25 + $4.10 $11.35 | $3.75 + $5.50 $9.25 | $8.35 + $15.00

LESSON 4

COMPLETE

Fractions

What is ½ of 36? 18 What is ⅓ of 27? 9

Calendar

State the month for each ordinal position of months in a year.

3rd Mar. 7th July 12th Dec. 8th Aug. 6th June

10th Oct. 2nd Feb. 4th Apr. 11th Nov. 5th May

Money

How many nickels are in $1.10? 22 How many quarters are in $4.00? 16

NOTES

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QUESTIONS

LESSON 48

COMPLETE

Money
What coin is $\frac{1}{10}$ of a dollar? What coin is $\frac{1}{4}$ of a dollar?

Calendar
- If it is 1829, what year was it $3\frac{1}{2}$ decades ago?
- If it is 2120, what year will it be 1 century plus $\frac{1}{2}$ a decade from now?

Measurements
There are 2,000 pounds in 1 ton. How many pounds are in 18 tons?

Add Money Amounts
$14.55 + $32.05 $11.90 + $14.30 $10.50 +

LESSON 49

COMPLETE

Add the Products of 2 Multiplication Problems
Multiply first, and then add the two products together.

(12 × 3) + (4 × 11) (8 × 6) + (7 × 5) (20 × 5) + (5 × 6)

Story Problem
Jan read for 55 minutes and stopped at 6:15 PM. What time did she start reading?

Subtract Money Amounts
$44.50 − $18.50 $69.25 − $40.00 $90.00 − $25.50

LESSON 50

COMPLETE

Elapsed Time
State how much time has passed.

12:18 PM to 2:45 PM 8:35 AM to 10:45 AM 4:05 PM to 5:59 PM

Skip Count
- by 6s from 6 to 72
- by 9s from 9 to 108

LESSON 51

COMPLETE

Powers of 10
Divide by powers of 10.

$8{,}000 \div 10^2$ $25{,}000 \div 10^3$ $50{,}000 \div 10^4$

Add Numbers Ending in 9
57 + 109 59 + 17 152 + 29 401 + 19

Story Problem
Malcolm began studying his vocabulary words at 10:14 AM. He finished at 11:27 AM. How long did he study?

After completing Lesson 51, place this piece onto your map on B−1.



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ANSWER KEY

LESSON 48

COMPLETE

Money

What coin is $\frac{1}{10}$ of a dollar? dime What coin is $\frac{1}{4}$ of a dollar? quarter

Calendar

- If it is 1829, what year was it $3\frac{1}{2}$ decades ago? 1794
- If it is 2120, what year will it be 1 century plus $\frac{1}{2}$ a decade from now? 2225

Measurements

There are 2,000 pounds in 1 ton. How many pounds are in 18 tons?

36,000

Add Money Amounts

$14.55 + $32.05 $46.60 $11.90 + $14.30 $26.20 $10.50 + $35.51

LESSON 49

COMPLETE

Add the Products of 2 Multiplication Problems

Multiply first, and then add the two products together.

(12 × 3) + (4 × 11) 80 (8 × 6) + (7 × 5) 83 (20 × 5) + (5 × 6) 130

Story Problem

Jan read for 55 m 5:20 PM stopped at 6:15 PM. What time did she start reading?

Subtract Money Amounts

$44.[$26.00]8.50 $25.50 $69[$29.25]40.00 $9[$64.50]

40 8

LESSON 50

COMPLETE

Elapsed Time

State how much time has passed.

12:18 PM to 2:45 PM 2 hours 27 minutes 8:35 AM to 10:45 AM 2 hours 10 minutes 4:05 PM to 5:59 PM 1 hour 54 minutes

Skip Count

- by 6s from 6 to 72 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72
- by 9s from 9 to 108 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108

LESSON 51

COMPLETE

Powers of 10

Divide by powers of 10.

8,000 ÷ 10^2 80 25,000 ÷ 10^3 25 50,000 ÷ 10^4 5

Add Numbers Ending in 9

57 + 109 166 59 + 76 15[181] 29 + 19 420

Story Problem

Malcolm began studying his vocabulary words 1 hour 13 minutes

NOTES

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ANSWER KEY

LESSON 106

COMPLETE

Fractions

What is $\frac{3}{4}$ of 80? 60 What is $\frac{1}{5}$ of 35? 7

Measurements

There are 100 centimeters in 1 meter. How many centimeters are in 12 meters? 1,200

Calendar

A decade is 10 years. If it is 1125, what year will it be 3 decades from now? 1155

Skip Count

- by 7s from 77 to 161 77, 84, 91, 98, 105, 112, 119, 126, 133, 140, 147, 154, 161
- by 20s from 20 to 120 20, 40, 60, 80, 100, 120

LESSON 107

COMPLETE

Roman Numerals

State the number for each Roman numeral.

XXXVIII 38 LXXXIV 84 LXII 62 XCIX 99 C 100

Measurements

There are 1,000 milliliters in 1 liter. How many milliliters are in 13 liters? 13,000

Change from $100

Determine the change from $100 for each amount.

$45.25 $54.75 $90. $9.85 $ $42.20 $68.00

LESSON 108

COMPLETE

Skip Count

- by 9s from 108 to 216 108, 117, 126, 135, 144, 153, 162, 171, 180, 189, 198, 207, 216
- by 12s from 12 to 144 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144

Add 100,000 to a Number

Increase the digit in the one hundred thousands place by 1. Regroup if needed.

29,461,056 29,561,056 957,963 1,057,963 100,000 200,000 680,575 780,575

LESSON 109

COMPLETE

Story Problems

- One pitcher of juice contains 8 cups. How many pitchers of juice are needed to fill 5 gallons? 10 pitchers
- Amy planted 72 blueberry bushes in 9 rows. How many blueberry bushes are in each row? 8 blueberry bushes

Add the Products of 2 Multiplication Problems

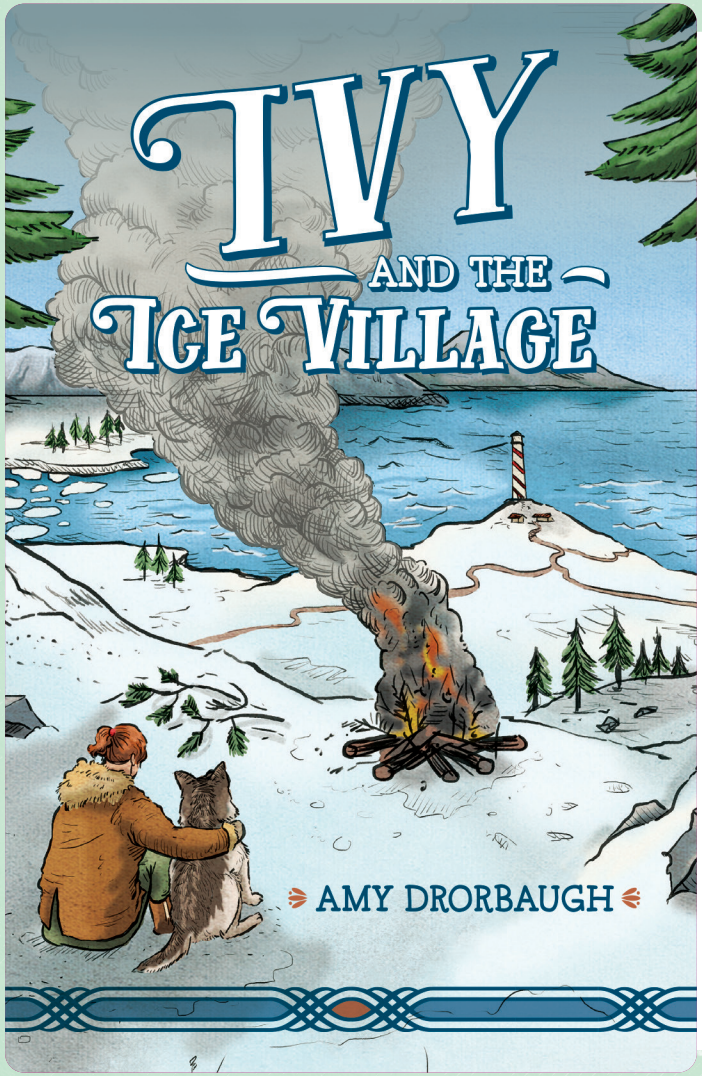
Multiply first, and then add the two products together.

(16 × 2) + (12 × 6) 104 (18 × 3) + (9 × 8) 126 (3 × 22) + (10 × 4) 106

NOTES

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Wait to read this book until after you have completed the course book!





Ivy rested her chin on her hand and stared out the window of her cottage, her bright green eyes unfocused and dreamy. The small cottage was set on the far side of the village, and the scene outside the window was the most beautiful in the whole world. Or at least Ivy thought so. From where Ivy sat, she could see the trees of the Endless Forest, which ran all the way to the Northern Mountains. In good weather she could see the peaks of those mountains, spearing up into the sky. Below the mountains were high cliffs; east of the village they were covered with thick ice, glowing with that deep crystal blue color you only find on glaciers.

But Ivy didn't notice the amazing scenery. She was listening closely for one particular sound under the normal sounds of her village. North Haven was a different type of village, set as it was at the edge of the great ice fields. It was a challenge to try and survive in a location that was so cold and covered in snow and ice

more than eight months of the year. The weather here was often cloudy and dark, and in the winter the sun only came up for a few hours before setting again. But Ivy didn't mind the cold and the isolation; she loved her tiny village.

The door to the cottage banged open, bouncing off the wall behind it. Her little brother, Leif, ran in, followed closely by her mother carrying her baby sister, Daisy. Mother had named the girls after plants, claiming she needed to see something alive and growing when everything was covered with snow. In a way, they both looked a little like flowers, with their bright red hair, green eyes, and pale skin. Ivy shivered in the chilly breeze that came through the door with her family and pulled her sweater tighter around her. Even now, at the end of summer, she needed to wear a couple of layers of clothing.

Mother smiled at Ivy as she set Daisy down in her swing. Then she noticed the blank paper in front of her daughter and shook her head.

"Ivy! Have you been daydreaming this whole time instead of doing your lesson?"

Ivy blushed as red as her hair and picked up her pencil quickly. How was she supposed to focus on schoolwork when tomorrow was her birthday and she was listening for her present to arrive!

Mother sighed and then smiled again, "It's all right; put that away for now and go gather some wood. I've got to get supper going, and Leif here needs to work on his addition."

Leif groaned dramatically and fell over on the couch, "Aw, Mom! Can't I work on my spelling instead? I learned a new word today. Assist, A-S-S-I-S-T."

"No, you're going to practice addition, and you can A-S-S-I-S-T me by getting it out."

Leif giggled as he pulled out his math books from the cupboard. Ivy pulled on her coat, making silly faces at baby



Daisy, and picked up the pail as she headed out the door. She set off for the small cluster of trees just outside of the village. Her pail was half full when her sharp ears caught the faint sound of bells. She straightened up and listened as closely as she could. Yes, there it was again, getting louder now. She grabbed the pail and started running back to the house, yelling when she was close enough.

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her, there were two bedrooms before the stairs continued up to the light platform. Father and Mr. Kala sat at a wide, wooden table in the middle of the room.

"So," Mr. Kala asked when they were done eating, "which route are you going to take tomorrow?"

"I thought I would let Ivy choose," Father smiled at her, "since it's her birthday."

"Is there more than one way to reach Siku?" Ivy asked.

"Yes, there are two possible routes we could take now: River Road or Mountain Pass. River Road takes us north along the seashore until we reach Nanook Point, then we turn inland and follow the river most of the way to Siku. It's the longer route, but it's relatively flat and easier on the dogs. And you may see a polar bear or two on the way. Or we can cut inland and take the mountain pass. It's steep and snowy, but it will have us in Siku a full six hours earlier than River Road. Think about it, and you can choose tomorrow."

Early the next morning, Ivy ate an enormous pile of Mrs. Kala's flapjacks while her father harnessed up the team. They waved goodbye to the Kalas, whom they would see again in two days, and started the dogs off. Ivy walked beside the sled, warming up muscles unusually sore from yesterday's journey.

After about an hour, the trail they were on split: one path headed north and the other west. "Well, Ivy Girl, what's it going to be?" Father asked. "Are we taking River Road or Mountain Pass?"

You Choose

A If Ivy chooses to take River Road, continue to **Part A** on page 59.

OR

B If Ivy chooses Mountain Pass, skip to **Part B** on page 61.

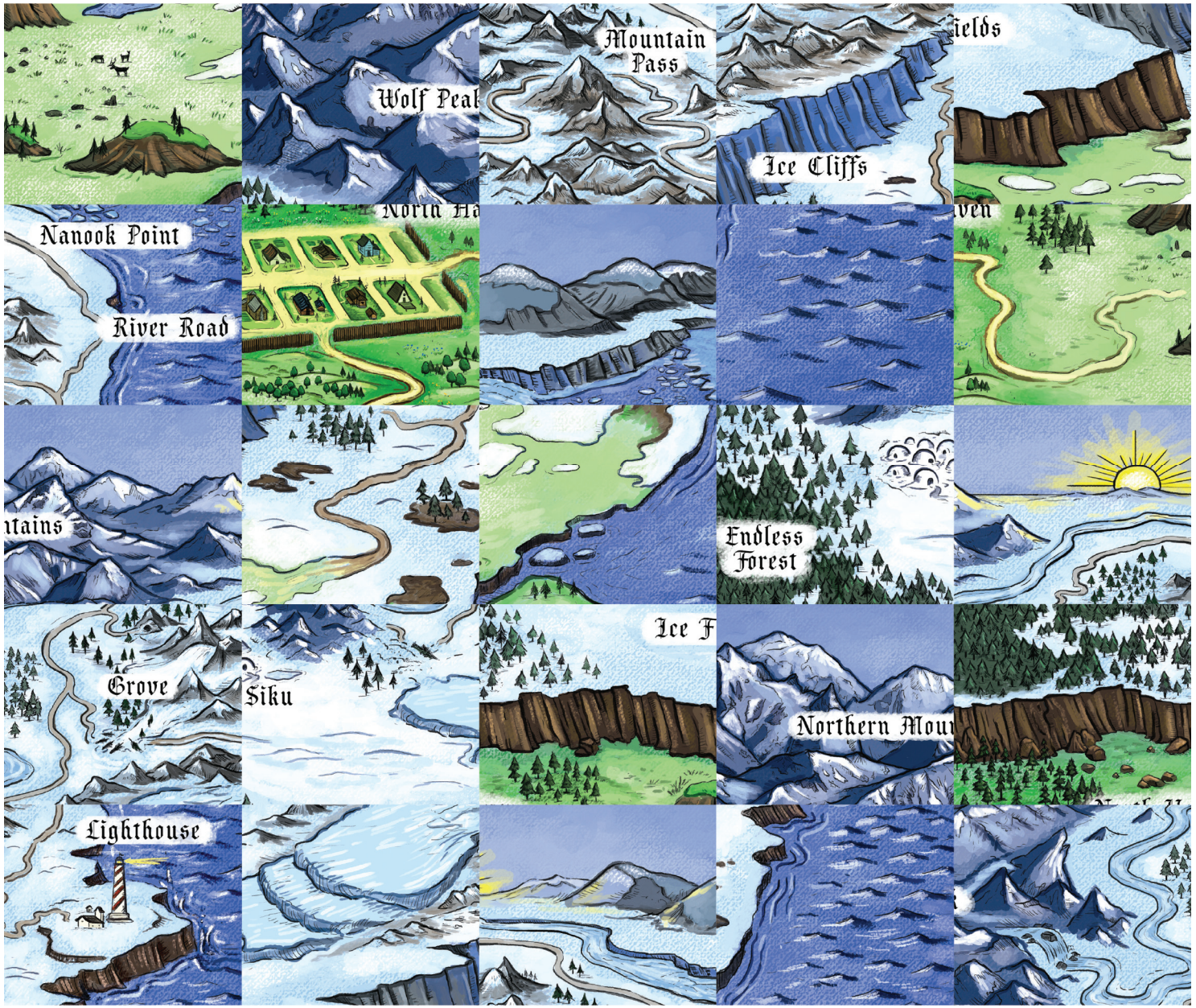
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Map

	1	2	3	4	5
A					
B					
C					
D					
E					

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Stickers



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