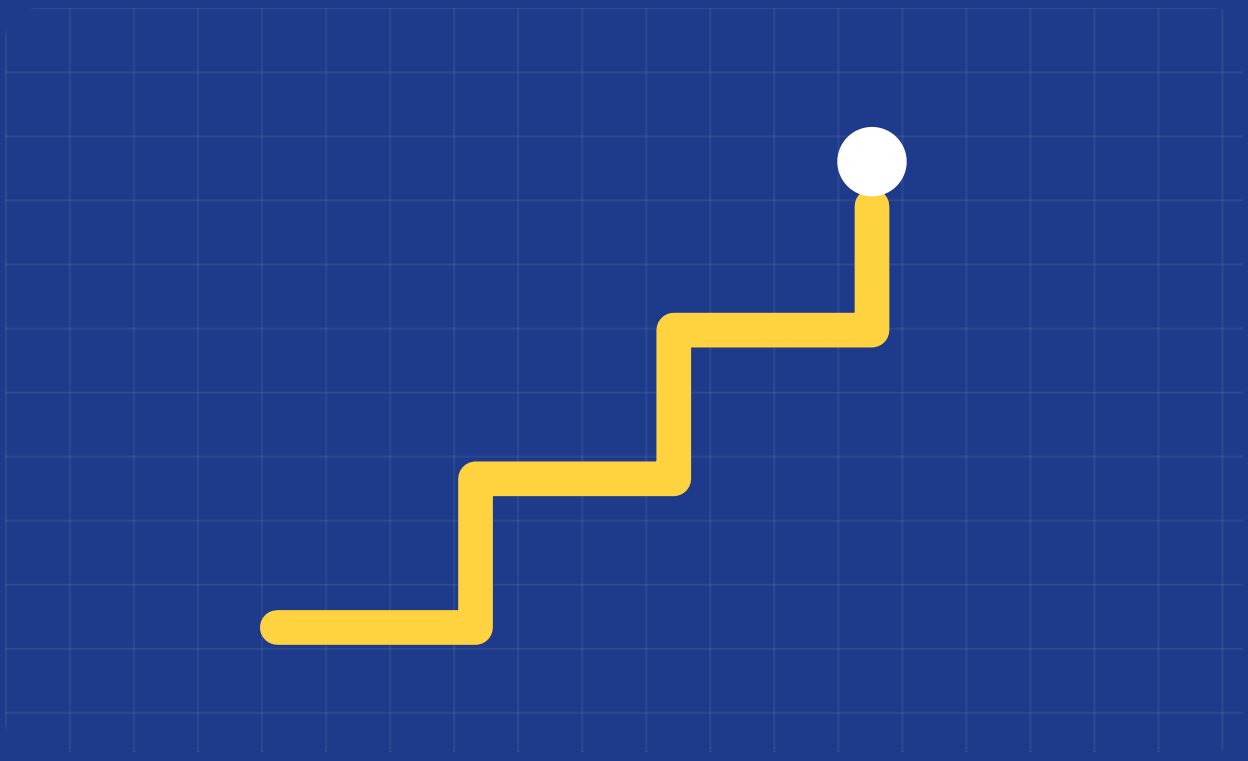
UpOnly Learning



PRIMARY 6

FREE SAMPLE WORKBOOK

Math (Singapore MOE syllabus) Primary 6

One step at a time. · Ages 11–12 · Free sample: 1 of 8 topics

UO-SGMATH-P6

OUR STORY

One step at a time

I'm Dr. Evan J. Hasson. I've run a specific chiropractic practice for over twelve years, and I'm a dad of three. My work is about alignment: get the structure right, and everything else works better.

At home, nothing was aligned. I was spending thousands a month on tutors, extracurriculars and programs, and when I asked about enrolling a second or third child the answer was always the same: that'll be double, that'll be triple. The charter school had a waiting list. The good public school had a waiting list. The private schools had the kind of list where it helps to know someone, or to give generously first.

And underneath all of it, the same quiet threat: if you don't pay for this, your child will fall behind. Not sold with evidence. Sold with fear.

So I did my own research, and here is what I found: none of it is secret. The standards are published. The order a student should learn in is written down and freely available. It is just scattered. Nobody had done the work of pulling it together, putting it in order and handing it over. So I did.

When every step has its place, confusion has nowhere to hide.

I built this for my own kids. I'm giving it to yours.

Dr. Evan J. Hasson, DC
Founder and dad of three

LEGAL

Copyright, license and disclaimers

Copyright. © 2026 UpOnly Learning, LLC. All rights reserved. UpOnly Learning™ and the step logo are trademarks of UpOnly Learning, LLC.

Free sample. This free sample may be printed and shared freely, as long as it is shared whole and unchanged, with this notice and the UpOnly Learning name. It may not be sold.

Not a school. UpOnly Learning is a private educational publisher, not a school, and is not affiliated with or endorsed by the US Department of Education, any state board of education or school district. This workbook does not award grades or credits and does not replace any curriculum your state requires. You are responsible for meeting your local homeschool laws.

Standards. Topics are aligned to academic standards in our own interpretation; the owners of those standards do not review or endorse this workbook. Common Core State Standards © Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

No guaranteed results, and mistakes happen. Every student learns differently. We write and review every question and answer key carefully, and we still get things wrong. An answer key can be wrong, and a question can be worded badly or have two defensible answers. Check the answer key before you hand it over, and trust your own judgment over ours. Found a problem? **Photograph the page and email it to support@uponlylearning.com**. The picture tells us more than a description, and we fix it for every family.

Safety. Some activities use household items such as scissors, coins or food. An adult should supervise and skip anything unsafe for the student.

Not professional advice. This workbook does not replace an evaluation by a qualified educator or specialist. The founder is a Doctor of Chiropractic; UpOnly Learning does not provide medical or health advice.

Full terms: uponlylearning.com/legal

INTRODUCTION

How to use this workbook

Each topic follows the same steps, so your student always knows what comes next.

① **Quick Check.** 10 questions before you teach. Read them aloud for younger students. A high score means you can move faster.

② **Learn It.** Key words, step-by-step teaching with lines you can read aloud, worked examples and the mistakes to watch for.

③ **We Do It Together.** 10 questions you do side by side. The answer and the "why" are printed right after each question, so you can talk it through.

④ **You Try.** 10 questions your student does alone.

Answers with short explanations for every question are in the **Answer Key** at the end of each topic, so students can work without peeking. Go over each wrong answer together using the explanation.

This workbook is printed in full color. To save ink, choose "Black and white" or "Grayscale" in your printer settings; every page still works in black and white.

Want online checks that score themselves and track each student's progress? Visit uponlylearning.com.

PRIMARY 6

CONTENTS · UO-SGMATH-P6

Math (Singapore MOE syllabus): Primary 6

Free Sample Workbook · Ages 11–12 · 1 of 8 topics, with a Quick Check, a lesson, We Do It Together, You Try and an answer key

Our story 2

Copyright, license and disclaimers 3

How to use this workbook 4

Topic 1 · Algebra **6**

Algebraic expressions; simple linear equations P6 N1

Quick Check 6 · Learn It 8 · We Do It Together 10 · You Try 12 · Answer Key 13

Algebra

By the end, the student can use a letter to stand for an unknown number, write and simplify simple algebraic expressions, find their value for a given number, and solve simple linear equations with whole number coefficients.

① Quick Check

Do this before the lesson. It shows what your student already knows. Score: ____ / 10

1. If n = 3, what is the value of 4n?

A 8 **B** 7 **C** 12 **D** 3

2. Find the value of 2c + 2 when c = 3.

A 6 **B** 8 **C** 25 **D** 5

3. If p = 4, what is the value of 9p?

A 27 **B** 13 **C** 94 **D** 36

4. Ravi is x years old. A cousin is 9 years older than Ravi. Write an expression for the cousin's age.

A 9x **B** 9 − x **C** x + 9 **D** x − 9

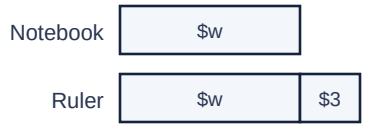
5. A notebook costs $d. A ruler costs $5 more than the notebook. Write an expression, in its simplest form, for the total cost of 1 notebook and 1 ruler.

A $(5d) **B** $(2d + 5) **C** $(d + 5) **D** $(2d)

6. Simplify 6n − 6 + 2n.

A 4n − 6 **B** 2n **C** 8n − 6 **D** 8n + 6

7. A notebook costs $w. A ruler costs $3 more than the notebook. Write an expression, in its simplest form, for the total cost of 1 notebook and 1 ruler.



A $(3w) **B** $(2w) **C** $(w + 3) **D** $(2w + 3)

8. Simplify $5c + 6 - 2c - 1$.

A $3c + 7$ **B** $3c + 5$ **C** $7c + 5$ **D** $8c$

9. Solve $q - 2 = 3$.

A $q = 2$ **B** $q = 1$ **C** $q = 3$ **D** $q = 5$

10. A box has c beads. Write an expression for the number of beads in 6 boxes.

A $c + 6$ **B** $6c$ **C** $c \div 6$ **D** $c - 6$

② Learn It

Key words

- **unknown**: a number we do not know yet
- **variable**: a letter, like x or n, that stands for a number
- **algebraic expression**: a math phrase with letters and numbers, like 3n + 2
- **simplify**: write an expression in a shorter way by putting like terms together
- **equation**: a number sentence with an equals sign, like 2x + 3 = 11
- **solve**: find the value of the unknown that makes the equation true

Warm-up

1. Ask: I think of a number, add 5, and get 12. What is my number? (7.)
2. Ask: ? × 4 = 28. What is the missing number? (7.)

> *You've been solving mystery numbers since you were little. Today we give the mystery number a name: a letter.*

Teach

1. Concrete: Hide some counters in an envelope without telling the student how many. Say: let n be the number of counters inside. Put 3 loose counters beside it. Ask: how many altogether? Write n + 3.
2. Show other expressions: 3 envelopes with n counters each is 3 × n, written 3n. Take 2 counters away from an envelope: n − 2. Share the envelope's counters among 4 people: n ÷ 4, also written n/4.
3. Finding the value: if n = 6, then 3n + 2 = 3 × 6 + 2 = 20. Remind the student to use the order of operations.
4. Simplifying: put 2 envelopes on the table, then 3 more envelopes. That is 2n + 3n = 5n. Like terms (all with n) combine. Numbers on their own combine too: 4n + 7 − n − 2 = 3n + 5.
5. Pictorial: draw a bar for 3n + 2: three n boxes and a small box of 2.

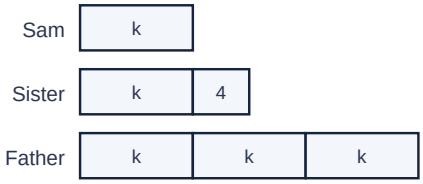


6. Equations: Say: I have 2 envelopes with the same number of counters and 3 loose counters. Altogether there are 11. Write 2n + 3 = 11.
7. Solve with a balance idea: take away 3 from both sides: 2n = 8. Share both sides by 2: n = 4. Open the envelopes to check.
8. Always check by putting the answer back in: 2 × 4 + 3 = 11. Correct.

> *A letter is just a box with a hidden number inside. Whatever we do to one side of an equation, we do to the other side, to keep it balanced.*

Guided practice

1. Write an expression together: Sam is k years old. His sister is 4 years older. (k + 4.) His father is 3 times as old as Sam. (3k.)



2. Find the value of 5y − 7 when y = 3 together (8).
3. Simplify 6p + 4 − 2p + 3 together (4p + 7).
4. Solve 4x − 5 = 19 together: add 5 to both sides, 4x = 24, x = 6. Check: 4 × 6 − 5 = 19.
5. Solve 3m + 8 = 26 together (m = 6) and check.

> *Say what the letter stands for before you start. Then check your answer by putting it back in.*

Worked examples

Find the value of 4a + 9 when a = 5.



29. Replace a with 5: 4 × 5 + 9 = 20 + 9 = 29.

Solve 5x + 6 = 41.



x = 7. Subtract 6 from both sides: 5x = 35. Divide both sides by 5: x = 7. Check: 5 × 7 + 6 = 41.

Watch for these mistakes

Mistake: 3n means 3 + n, or if n = 4, then 3n is 34.
Fix: Show 3 envelopes each with n counters inside. 3n means 3 × n. If n = 4, then 3n = 12.

Mistake: When simplifying, 2n + 5 can be written as 7n.
Fix: Use the counters: 2 envelopes and 5 loose counters cannot be joined into 7 envelopes. Only like terms (both with n, or both plain numbers) can be combined.

③ We Do It Together: 10 questions

> *Do these side by side. Read each question together, let your student answer, then read the answer and the "why" right below it and talk it through.*

1. If b = 3, what is the value of 3b?

A 6 **B** 33 **C** 9 **D** 3

> **Answer: C** 9
> **Why:** 3b means 3 × b, not the digits 3 and b side by side. So 3 × 3 = 9.

2. Tariq is c years old. A cousin is 4 years younger than Tariq. Write an expression for the cousin's age.

A c + 4 **B** 4 − c **C** c − 4 **D** 4c

> **Answer: C** c − 4
> **Why:** Younger by 4 means subtract 4 from Tariq's age: c − 4.

3. Find the value of 7w + 14 when w = 3.

A 35 **B** 87 **C** 24 **D** 21

> **Answer: A** 35
> **Why:** 7w means 7 × w. Replace w with 3: 7 × 3 + 14 = 21 + 14 = 35.

4. Solve 3b = 24.

A b = 9 **B** b = 8 **C** b = 21 **D** b = 72

> **Answer: B** b = 8
> **Why:** Divide both sides by 3: b = 24 ÷ 3 = 8.

5. Find the value of 4b − 31 when b = 11.

A 9 **B** 13 **C** 17 **D** 380

> **Answer: B** 13
> **Why:** Multiply before subtracting: 4 × 11 = 44, then 44 − 31 = 13.

6. Simplify 6q + 11 − 3q − 3.

A 11q **B** 3q + 14 **C** 9q + 8 **D** 3q + 8

> **Answer: D** 3q + 8
> **Why:** Put like terms together: 6q − 3q = 3q and 11 − 3 = 8. A letter term and a number cannot be combined, so the answer is 3q + 8.

7. Simplify 7q + 10 − q − 3.

A 6q + 13 **B** 8q + 7 **C** 6q + 7 **D** 13q

> **Answer: C** 6q + 7
> **Why:** Put like terms together: 7q − q = 6q and 10 − 3 = 7. A letter term and a number cannot be combined, so the answer is 6q + 7.

8. Write an expression, in its simplest form, for the perimeter of this rectangle.



A (2w + 4) cm **B** (2w + 8) cm **C** (w + 4) cm **D** (8w) cm

> **Answer: B** (2w + 8) cm
> **Why:** Perimeter = w + 4 + w + 4. Like terms: w + w = 2w and 4 + 4 = 8, so the perimeter is (2w + 8) cm.

9. Find the value of 6p + 3 when p = 7.

A 10 **B** 45 **C** 42 **D** 16

> **Answer: B** 45
> **Why:** 6p means 6 × p. Replace p with 7: 6 × 7 + 3 = 42 + 3 = 45.

10. Find the value of 9q + 1 when q = 3.

A 28 **B** 13 **C** 94 **D** 4

> **Answer: A** 28
> **Why:** 9q means 9 × q. Replace q with 3: 9 × 3 + 1 = 27 + 1 = 28.

④ You Try: 10 questions

Now your student works alone. Check answers in the Answer Key at the end of this topic. Score: ____ / 10

1. A box has n pencils. Write an expression for the number of pencils in 8 boxes.

A n − 8 **B** n ÷ 8 **C** n + 8 **D** 8n

2. Simplify 9k + 3k − k.

A 11k **B** 11 **C** 5k **D** 13k

3. Find the value of 4m + 11 when m = 2.

A 8 **B** 17 **C** 13 **D** 19

4. Find the value of 4 × (c + 7) when c = 9.

A 43 **B** 64 **C** 36 **D** 20

5. Find the value of 3b − 4 when b = 4.

A 5 **B** 30 **C** 8 **D** 3

6. Find the value of 3 × (m + 5) when m = 5.

A 20 **B** 15 **C** 13 **D** 30

7. Simplify 4x − 9 + x.

A 5x − 9 **B** 3x − 9 **C** 14x **D** 5x + 9

8. The bar model shows c + 6 = 17. Solve for c.



A c = 23 **B** c = 11 **C** c = 6 **D** c = 17

9. Grace is w years old. A cousin is 2 years older than Grace. Write an expression for the cousin's age.

A w − 2 **B** w + 2 **C** 2w **D** 2 − w

10. Simplify 9b + 6b − 3b.

A 12b **B** 18b **C** 14b **D** 12

Algebra: Answers and explanations

① Quick Check

1. If n = 3, what is the value of 4n?
   C 12
   4n means 4 × n, not the digits 4 and n side by side. So 4 × 3 = 12.

2. Find the value of 2c + 2 when c = 3.
   B 8
   2c means 2 × c. Replace c with 3: 2 × 3 + 2 = 6 + 2 = 8.

3. If p = 4, what is the value of 9p?
   D 36
   9p means 9 × p, not the digits 9 and p side by side. So 9 × 4 = 36.

4. Ravi is x years old. A cousin is 9 years older than Ravi. Write an expression for the cousin's age.
   C x + 9
   Older by 9 means add 9 to Ravi's age: x + 9.

5. A notebook costs $d. A ruler costs $5 more than the notebook. Write an expression, in its simplest form, for the total cost of 1 notebook and 1 ruler.
   B $(2d + 5)
   The ruler costs $(d + 5). Together: d + d + 5 = 2d + 5, so the total is $(2d + 5).

6. Simplify 6n − 6 + 2n.
   C 8n − 6
   Put like terms together: 6n + 2n = 8n. The − 6 stays as it is, so the answer is 8n − 6.

7. A notebook costs $w. A ruler costs $3 more than the notebook. Write an expression, in its simplest form, for the total cost of 1 notebook and 1 ruler.
   D $(2w + 3)
   The ruler costs $(w + 3). Together: w + w + 3 = 2w + 3, so the total is $(2w + 3).

8. Simplify 5c + 6 − 2c − 1.
   B 3c + 5
   Put like terms together: 5c − 2c = 3c and 6 − 1 = 5. A letter term and a number cannot be combined, so the answer is 3c + 5.

9. Solve q − 2 = 3.
   D q = 5
   Add 2 to both sides: q = 3 + 2 = 5.

10. A box has c beads. Write an expression for the number of beads in 6 boxes.
    B 6c
    6 boxes with c in each is 6 × c, which is written 6c.

④ You Try

1. A box has n pencils. Write an expression for the number of pencils in 8 boxes.

   D 8n

   8 boxes with n in each is 8 × n, which is written 8n.

2. Simplify 9k + 3k − k.

   A 11k

   All three are like terms in k, so combine the numbers in front: 9 + 3 − 1 = 11. The answer is 11k.

3. Find the value of 4m + 11 when m = 2.

   D 19

   4m means 4 × m. Replace m with 2: 4 × 2 + 11 = 8 + 11 = 19.

4. Find the value of 4 × (c + 7) when c = 9.

   B 64

   Replace c with 9 and work out the parentheses first: 4 × (9 + 7) = 4 × 16 = 64.

5. Find the value of 3b − 4 when b = 4.

   C 8

   Multiply before subtracting: 3 × 4 = 12, then 12 − 4 = 8.

6. Find the value of 3 × (m + 5) when m = 5.

   D 30

   Replace m with 5 and work out the parentheses first: 3 × (5 + 5) = 3 × 10 = 30.

7. Simplify 4x − 9 + x.

   A 5x − 9

   Put like terms together: 4x + x = 5x. The − 9 stays as it is, so the answer is 5x − 9.

8. The bar model shows c + 6 = 17. Solve for c.

   B c = 11

   Take 6 away from both sides: c = 17 − 6 = 11.

9. Grace is w years old. A cousin is 2 years older than Grace. Write an expression for the cousin's age.

   B w + 2

   Older by 2 means add 2 to Grace's age: w + 2.

10. Simplify 9b + 6b − 3b.

    A 12b

    All three are like terms in b, so combine the numbers in front: 9 + 6 − 3 = 12. The answer is 12b.

THE FULL WORKBOOK

Keep going with the full Math (Singapore MOE syllabus) workbook

You just tried one topic. The full Primary 6 workbook has every topic below, each with a Quick Check, a lesson, We Do It Together, up to 90 You Try questions, Show What You Know and a full answer key.

1. Algebra P6 N1
2. Fractions division P6 N2
3. Ratio and percentage P6 N3
4. Circles P6 M1
5. Volume of solids and liquids P6 M2
6. Special quadrilaterals and angles P6 G1
7. Nets P6 G2
8. Pie charts P6 S1

Get it, plus online lessons with self-scoring checks and progress tracking, at **uponlylearning.com**.

More from UpOnly Learning

Every subject, kindergarten through 8th grade, in English, Spanish and Portuguese. 955 topics · 110,000+ practice questions.

Membership

On-screen lessons, practice, Quick Checks, progress reports and rewards in every subject, for the whole household.

Practice workbooks

Printable workbooks for every subject and grade, including Common Core and Singapore math, with every answer explained.

Prepare books

Prepare for the next grade: short books that get students ready for a new school year.

Three free checks, three passes

Each free check shows exactly where to begin, and each pass gives the full plan:

- **Rebuild Your Foundation** helps fill the gaps in K–8 math, reading and English.
- **Language pass** helps students learn a new language, one step at a time.
- **Business pass** helps develop a business mind: real skills, ideas and a plan.

Flashcards

Digital flashcards with audio in several languages, plus printable cards.

Learning games

The Math You Build, The Words You Find, read-along stories, a science game and typing practice.

Free resources

Free lessons, samples, guides and family books for students, parents, teachers and tutors.

Visit

uponlylearning.com

UpOnly Learning

Your next step starts here

Free workbooks, practice sheets and parent guides, plus printable books for every grade we cover, in English, Spanish and Portuguese. We keep adding new grades and subjects, so see what's new on our website.

Visit uponlylearning.com

Help us make this better

We are constantly updating our material so it keeps getting better. If you spot a mistake, photograph the page and email it to support@uponlylearning.com. We read every message.

One step at a time.

UO-SGMATH-P6 · © 2026 UpOnly Learning, LLC. Free sample · free to print and share.