

ALGEBRA BUNDLE

Name _____

1. THE ELEMENT OF THE UNKNOWN

In algebra, a symbol is used for the unknown. The symbol is usually a letter in the Alphabet. A popular letter is the letter x .

$1 + 2 = x$ This is a mathematical statement, meaning two things are equal.

$1 + 2$ is equal to the other side - the unknown

The goal is to figure out the unknown.

$3 = x$ This is the same as $x = 3$

"x" represents an unknown number.

I can figure out the unknown!

1. $3 + 10 = x$	4. $17 + 3 = x$
_____ = x	_____ = x
x =	x =
2. $12 - 6 = x$	5. $25 - 20 = x$
_____ = x	_____ =
x =	x =
3. $23 - 10 = x$	6. $8 + 2 = x$
_____ = x	_____ =
x =	x =

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Name _____

ALGEBRAIC EXPRESSIONS: CHALLENGE – 2

1. Let's say you ended up with 11 apples. Use your expression from challenge 1 to figure out what your secret starting number ('x') must have been. Show your work!

Make up your apple challenge. Write an algebraic and then solve it for two different starting

"x" represents an unknown number.

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Name _____

ALGEBRAIC EXPRESSIONS: CHALLENGE – 4

1. Now you're going to enter the Whispering Woods and try the apple box ritual yourself. Choose any number of apples and test the magic box.

2. Create your own "magic math routine" that always ends in a specific number.

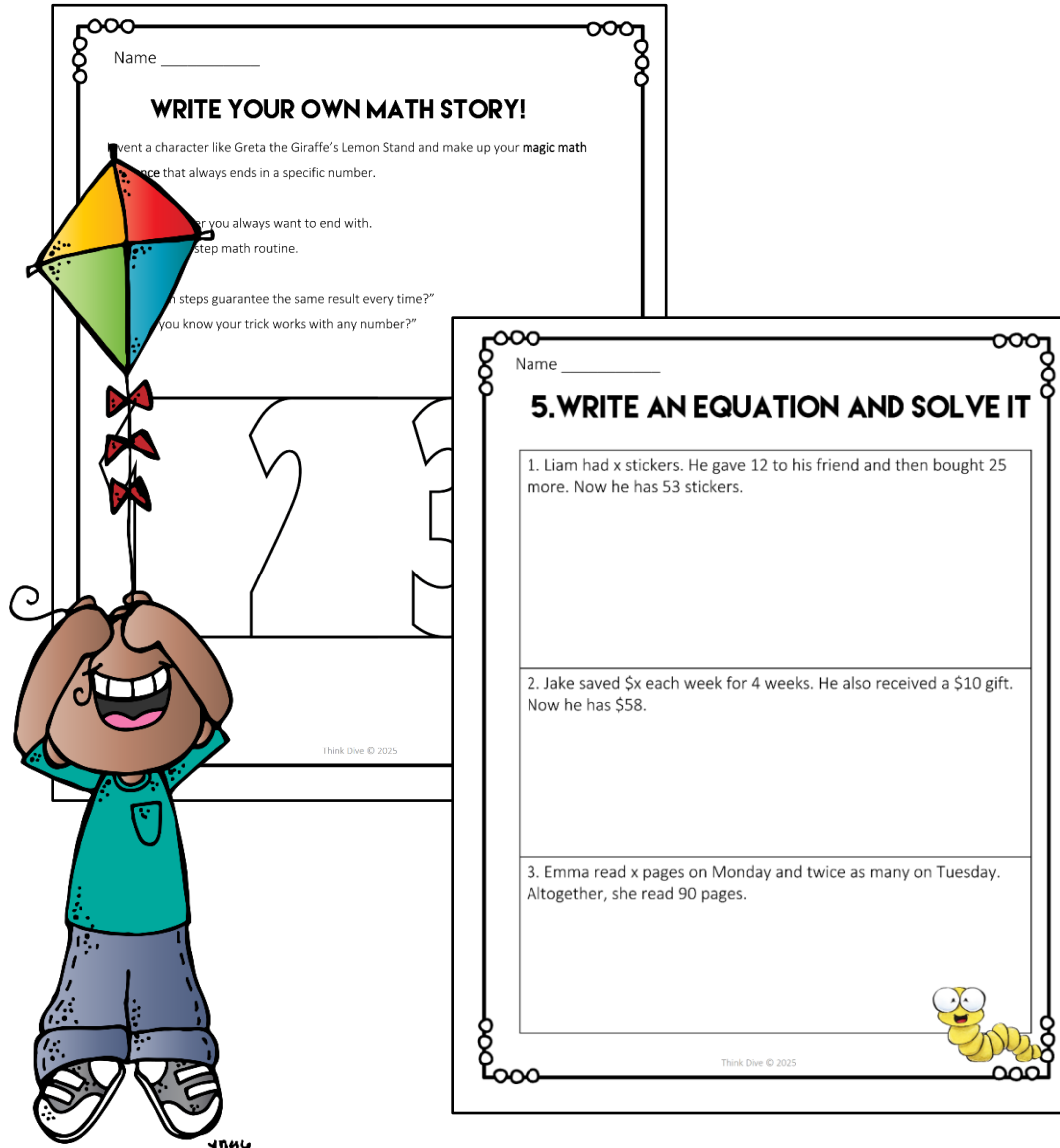
Explain your ideas and thinking!

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Basic Algebra
Problem & Algebra
Word Problems.
Metacognition –
Reflection.

Color
Answer Keys

WHAT'S INCLUDED:



Pages with Algebra Problems.
Pages with Algebra word problems.
Algebraic Challenges.
Math Story.
Metacognition – Reflection.

Ways to Use

Algebra Units Centers Early Finishers Independent Work

Name _____

2. THE ELEMENT OF THE UNKNOWN

In algebra, a symbol is used for the unknown. The symbol is usually a Letter in the Alphabet.

$1 + 5 = t$ This is a mathematical statement, meaning two things are equal.

$1 + 5$ is equal to the other side - the unknown

The goal is to figure out the unknown.

$6 = t$ This is the same as $t = 6$

Any letter can represent an unknown number.

I can figure out the unknown!

1. $33 + 10 = y$ _____ = y y =	4. $29 + 3 = m$ _____ = m m =
2. $11 - 7 = n$ _____ = n n =	5. $50 - 20 = t$ _____ = t t =
3. $40 + 10 = s$ _____ = s s =	6. $48 + 1 = x$ _____ = x x =

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Name _____

3. THE ELEMENT OF THE UNKNOWN

In algebra, a symbol is used for the unknown. The symbol is usually a Letter in the Alphabet.

$x + 5 = 6$ This is a mathematical statement, meaning two things are equal.

$x + 5$ is equal to the other side, which is 6

Algebra is like puzzle!

ALGEBRAIC EXPRESSIONS: STORY

Once upon a time in the heart of the Whispering Woods, there lived a clever little fox named Finley. He was not just brilliant, he was a math magician! His greatest secret? A mysterious, glowing apple box which he said held secrets of the universe (or at least, apple-based ones).

Every morning, forest creatures gathered in a line outside Finley's den, eager to test the powers of the box.

Step right up!" Finley called out with a grin, tail flicking with excitement. "Pick any number of apples to start with. The box can handle it!"

Herman the Hedgehog was first.

"I'll start with **8 apples**," he said, rolling them in.

Olive the Owl fluttered up next.

"I want to try **20**!"

Rupert the Rabbit bounced up excitedly.

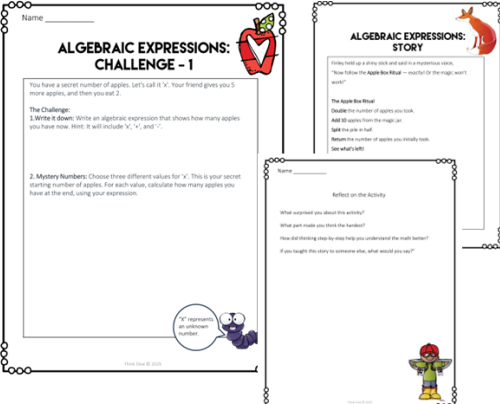
"I choose **100**! That box won't trick me!"

the unknown

$3 \times c = 18$ c =
$8 \times t = 72$ t =
$b \times 7 = 42$ b =
$r / 5 = 4$ r =

You may like these resources!

EXPLORE ALGEBRAIC EXPRESSIONS

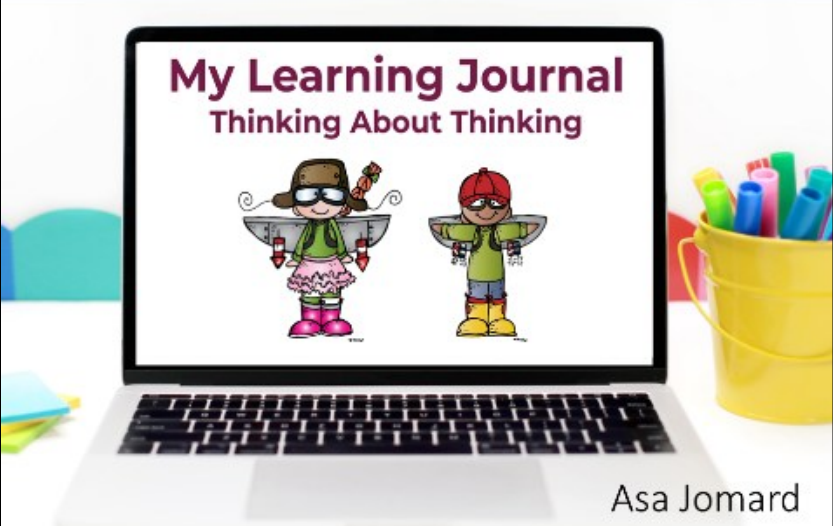


The worksheet is divided into two main sections. The left section, 'ALGEBRAIC EXPRESSIONS: CHALLENGE - 1', includes a 'The Challenge' section where students write an algebraic expression for a given scenario, and a 'Mystery Numbers' section where they substitute values for 'x' and 'y' into an expression. The right section, 'ALGEBRAIC EXPRESSIONS: STORY', presents a word problem about apples and asks students to write an expression and then evaluate it for a given value. A blue caterpillar character is positioned between the two sections, and a small robot character is at the bottom right of the worksheet.

**MATH
CHALLENGES
GRADE 4**

Asa Jomard

CREATIVE & THINKING JOURNAL GOOGLE CLASSROOM™



The image shows a laptop screen displaying the title 'My Learning Journal Thinking About Thinking' above two cartoon characters, a girl and a boy, who are holding up signs. To the right of the laptop is a yellow bucket filled with various colored markers. The background is a simple white surface with a blue and yellow object partially visible on the left.

Asa Jomard

You find me at



THINK DIVE - SPARKING CHILDRENS THINKIBILITY



BIOMIMICRY FOR YOUNG CHILDREN



TEACHER PAY TEACHER



PINTEREST



BIOMIMICRY FOR YOUNG CHILDREN

Name _____

REFLECT ON THE ALGEBRA ACTIVITIES

What Did I Do First?

- ☐ I looked for patterns.
- ☐ I thought about what the unknown could be.
- ☐ I used a math strategy I already knew.
- ☐ I wasn't sure. I just guessed.

In your own words, describe your first step:

What Strategy Did I Use?

- ☐ I used trial and error.
- ☐ I drew a picture or model.
- ☐ I used a number sentence.

_____ words

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