ASPIRE TO POWER LEARNING

Inspire. Learn. Achieve.

YEAR 7

Algebra Foundations

From unknowns to "I understand".

A LITTLE PRACTICE. A LOT MORE CLARITY.

- Clear explanations and worked examples
- Guided practice, then independent questions
- Problem solving and complete answer keys

$$3x + 4 = 19$$

Subtract 4. Divide by 3. x = 5.

20 pages / 80 questions / Worked answers

STARTER PACK | A4 PRINTABLE PDF | AUSTRALIAN ENGLISH

Focused topic practice - suggested year level is a guide, not a full course.

01 Read and write expressions

LEARN & TRY

Example: "three times a number, then add 5" becomes 3x + 5. In 3x + 5, x is a variable, 3 is its coefficient and 5 is a constant. An expression has no equals sign.

01 Write an algebraic expression for: a number x increased by 7.

02 Write an algebraic expression for: 5 times a number n.

03 Write an algebraic expression for: a number y decreased by 4.

04 Write an algebraic expression for: a number m divided by 3.

05 Write an algebraic expression for: double a number a, then add 6.

06 Write an algebraic expression for: 9 less than a number p.

01 Read and write expressions

PRACTISE & EXPLAIN

Order matters: 7 less than x is x - 7, not 7 - x.

07 In the expression 4x + 9, state the coefficient of x and the constant.

08 In 7a - 3, how many terms are there? Name them.

09 Write 6 multiplied by t using standard algebra notation.

10 Write k/5 in words.

11 A ticket costs $c. Write the cost of 4 tickets.

12 A book costs $b and postage is $3. Write the total cost.

Preview answers

Check your reasoning, not only your final answer. Equivalent correct forms are welcome.

01 x + 7

A letter stands for the unknown number. A coefficient next to a letter means multiplication.

02 5n

A letter stands for the unknown number. A coefficient next to a letter means multiplication.

03 y - 4

A letter stands for the unknown number. A coefficient next to a letter means multiplication.

04 m/3

A letter stands for the unknown number. A coefficient next to a letter means multiplication.

05 2a + 6

A letter stands for the unknown number. A coefficient next to a letter means multiplication.

06 p - 9

A letter stands for the unknown number. A coefficient next to a letter means multiplication.

07 Coefficient 4; constant 9.

4 multiplies x. The 9 is a fixed number.

08 2 terms: 7a and -3.

Terms are separated by + or - signs; keep the sign with each term.

09 6t

The multiplication symbol is usually omitted between a number and a letter.

10 k divided by 5.

The fraction bar means division.

11 4c dollars.

Four identical ticket prices are added: c + c + c + c.

12 (b + 3) dollars.

Add the fixed postage cost to the book price.