The Panda Math Tutor

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Expanding Brackets

Student Worksheet

Questions & Working Space

IGCSE Mathematics

Name: _____

Date: _____

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Note

How to use this worksheet. These questions are built *strictly* on the *Expanding Brackets* notes: expanding a single bracket, expanding with a variable (or a negative) outside the bracket, expanding and simplifying several brackets, double brackets by FOIL or the grid method, the two special cases $(a \pm b)^2$ and $(a+b)(a-b)$, three or more brackets, longer combined expressions, and applications to area, algebraic proof and forming equations.
Working space. Ruled lines are provided after each question — show *all* of your working there. Write your final answers in descending powers, and count your terms before simplifying: two binomials must give *four* products.
Checking your answers. Full step-by-step solutions, a marking scheme for the exam paper, and a quick answer key are in the separate booklet *"Expanding Brackets — Solutions & Answer Key."* Try each question honestly before you look. A quick check on any expansion is to substitute a simple value such as $x = 2$ into both the original and your answer.

1 Part I — Topic-by-Topic Exercises

1.1 Expanding a Single Bracket

Exercise SB1 *[Basic]*

Expand $5(x+3)$.

Exercise SB2 *[Basic]*

Expand $8(2y-5)$.

Exercise SB3 *[Basic]*

Expand $6(3a+4)$.

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Exercise SB4 *[Standard]*

Expand $-4(3m + 7)$.

Exercise SB5 *[Standard]*

Expand $-9(2p - 5)$.

Exercise SB6 *[Standard]*

Expand $12(2x - 3y + 5)$.

Exercise SB7 *[Intermediate]*

Expand $-5(4 - 3k)$ and write your answer starting with the k term.

Hint

Multiply -5 by each term *including its own sign*. The second product is negative $\times$ negative.

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Preview ends here

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Expanding Brackets — Worksheet — €11.99

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