

The Panda Math Tutor

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Linear Equations

Student Worksheet
Questions & Working Space
IGCSE Mathematics

Name: _____

Date: _____

Prepared by

Nikolas Agisilaou

Teach → Practice → Reason → Apply → Challenge → Master

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Note

How to use this worksheet. These questions are built *strictly* on the *Linear Equations* notes: the balance principle and inverse operations, one-step and two-step equations, equations with brackets, equations with fractions, equations with the unknown on both sides, and forming equations from word problems.

Show every step. Write one line of working per operation, and say what you are doing (“subtract 9 from both sides”, “multiply every term by 12”). Method marks are awarded for this even when the final answer is wrong.

Always check. Substitute your answer back into the *original* equation and confirm that both sides are equal. In word problems, answer in a full sentence with units.

Working space. Ruled lines are provided after each question. Harder questions have a teal **Hint** box; try the question first and use the hint only if you are stuck.

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 “*Linear Equations — Solutions & Answer Key.*” Try each question honestly before you look.

1 Part I — Topic-by-Topic Exercises

1.1 One-Step Equations

Exercise OS1 [Basic]

Solve $x + 14 = 23$.

Exercise OS2 [Basic]

Solve $y - 8 = 17$.

Exercise OS3 *[Basic]*

Solve $6m = 54$.

Exercise OS4 *[Standard]*

Solve $\frac{n}{5} = 12$.

Exercise OS5 *[Standard]*

Solve $p + 3.5 = 9.2$.

Exercise OS6 *[Intermediate]*

Solve $15 - w = 4$, and state which inverse operation you used.

Hint

The unknown is being subtracted here. Either add w to both sides first, or subtract 15 from both sides and then divide by -1 . Both routes give the same answer.

Preview ends here

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