Inkleaf LEARNING

Name _____

Date _____

Year 7 Maths

Solving equations.

I can solve one-step and two-step linear equations.

1 Practise

Solve each equation. Think of it as a balance: do the same to both sides.

$x + 7 = 15$ $x =$ ☐

$x - 4 = 9$ $x =$ ☐

$3x = 21$ $x =$ ☐

$x \div 5 = 6$ $x =$ ☐

$2x + 3 = 11$ $x =$ ☐

$5x - 2 = 18$ $x =$ ☐

2 Use It

Write an equation for each problem, then solve it in the grid.

I think of a number, multiply it by 4 and add 5. The answer is 33. What is my number?

Equation: _____

My number is ☐

A taxi charges £3 plus £2 for every mile. The fare was £17. How many miles?

Equation: _____

☐ miles

A rectangle has a perimeter of 26 cm and a length of 8 cm. Find its width.

Equation: _____

width = ☐ cm

3 Spot The Mistake

Jas solved $3x + 4 = 19$ like this: $3x = 23$, so $x = \frac{23}{3}$

What went wrong? Solve it correctly in the grid.

_____

$x =$ ☐

☆ Challenge

Solve $2(x + 3) = x + 10$ in two different ways. Show both in the grid.

$x =$ ☐ Which way is quicker, and why? _____

_____



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Year 7 Maths

For grown-ups: how to help, and the answers.

How To Help

- Think of an equation as a balance: whatever you do to one side, do to the other.
- Check every answer by putting it back into the equation. If both sides match, it is right.
- Encourage one step per line. It makes mistakes easy to spot.

Practise

1. 8
2. 13
3. 7
4. 30
5. 4
6. 4

Use It

1. $4n + 5 = 33$, so $n = 7$
2. $3 + 2m = 17$, so $m = 7$ miles
3. $2(8 + w) = 26$, so $w = 5$ cm

Spot The Mistake

1. Jas added 4 instead of subtracting it. $3x = 15$, so $x = 5$.

Challenge

1. $x = 4$. Expand first: $2x + 6 = x + 10$, so $x = 4$. Or try values: $x = 4$ gives 14 on both sides. Expanding is quicker once the numbers get harder.