One-Step Equations and Expression Evaluation: A Beginner Algebra Starter Set

Original tasks 1, 2, 3, 4 / complete keys

Task 1

Solve x + 9 = 15.

Answer: x = 6

Reason: Subtract 9 from both sides: x + 9 - 9 = 15 - 9, so x = 6. Check: 6 + 9 = 15.

Check: Substitute 6 into the original equation and confirm both sides equal 15.

Task 2

Solve 5y = 35.

Answer: y = 7

Reason: Divide both sides by 5: 5y divided by 5 equals 35 divided by 5, so y = 7. Check: 5 times 7 = 35.

Check: Multiply 5 by 7 and confirm the product is 35.

Task 3

Evaluate 3m + 4 when m = 5.

Answer: 19

Reason: Substitute 5 for m: 3 times 5 plus 4 equals 15 plus 4, which is 19.

Check: Recompute 3 times 5 first, then add 4, and confirm the result is 19.

Task 4

Evaluate 2n - 6 when n = -3.

Answer: -12

Reason: Substitute -3 in parentheses: 2 times (-3) minus 6 equals -6 minus 6, which is -12.

Check: Re-evaluate 2 times (-3) as -6, then subtract 6, and confirm the result is -12.

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Source rubric / reflection

- [ ] Equation solution shows the inverse operation applied to both sides.
- [ ] Variable is isolated correctly and the answer is stated clearly.
- [ ] Check step substitutes the answer into the original equation.
- [ ] Expression evaluation shows the substitution step with parentheses for negatives.
- [ ] Order of operations is followed correctly.
- [ ] Final values are labeled and units are included when given.
- [ ] Handwriting convention: each step on its own line, equals signs aligned, variables clearly formed; valid letter styles are accepted.

Reflection: What did you check, what did you change, and what will you try next?