Blank Function Table Template: Input, Rule, Output Practice

Complete worked example / separate answer key

Complete a table for the rule multiply by 4 then add 3 using inputs 1, 2, and 5. Label columns Input, Rule, Output.

Answer: Input 1 gives 1 times 4 equals 4, then 4 plus 3 equals 7. Input 2 gives 8 plus 3 equals 11. Input 5 gives 20 plus 3 equals 23. Outputs are 7, 11, and 23.

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Original tasks 1, 2, 3 / complete keys

Task 1

Complete a table for the rule multiply by 2 then subtract 1 using inputs 3, 4, and 6.

Answer: Input 3 gives 6 minus 1 equals 5. Input 4 gives 8 minus 1 equals 7. Input 6 gives 12 minus 1 equals 11. Outputs are 5, 7, and 11.

Reason: Apply multiplication first, then subtraction, for each row independently.

Check: Reverse one row: add 1 to the output, then divide by 2. For output 11, 11 plus 1 equals 12, and 12 divided by 2 equals 6, matching the input.

Task 2

Complete a table for the rule add 5 then multiply by 3 using inputs 0, 2, and 4.

Answer: Input 0 gives 0 plus 5 equals 5, then 5 times 3 equals 15. Input 2 gives 7 times 3 equals 21. Input 4 gives 9 times 3 equals 27. Outputs are 15, 21, and 27.

Reason: Addition occurs before multiplication because the rule states add then multiply.

Check: Reverse one row: divide the output by 3, then subtract 5. For output 21, 21 divided by 3 equals 7, and 7 minus 5 equals 2, matching the input.

Task 3

A table has inputs 1, 3, and 5 with rule multiply by 10 then add 2. Complete the outputs and state the unit if inputs are in centimeters.

Answer: Input 1 gives 12. Input 3 gives 32. Input 5 gives 52. Outputs are 12, 32, and 52 centimeters.

Reason: Multiply each input by 10, add 2, and keep the centimeter unit on outputs.

Check: Subtract 2 from an output and divide by 10. For 52, 52 minus 2 equals 50, and 50 divided by 10 equals 5, matching the input.

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Original tasks 4 / complete keys

Task 4

Complete a table for the rule divide by 2 then add 7 using inputs 4, 8, and 10. Use whole-number outputs only.

Answer: Input 4 gives 2 plus 7 equals 9. Input 8 gives 4 plus 7 equals 11. Input 10 gives 5 plus 7 equals 12. Outputs are 9, 11, and 12.

Reason: Divide first, then add 7. All chosen inputs are even, so outputs are whole numbers.

Check: Subtract 7 from an output and multiply by 2. For 12, 12 minus 7 equals 5, and 5 times 2 equals 10, matching the input.

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Worked example, Task 1, Task 2, Task 3, Task 4 / Answer Sheet: Outputs, Reasoning, and Check Methods

Text-only key listing outputs, reasoning, and check methods for each exercise, plus the worked example.

Worked example: Complete a table for the rule multiply by 4 then add 3 using inputs 1, 2, and 5. Label columns Input, Rule, Output.

Worked example answer: Input 1 gives 1 times 4 equals 4, then 4 plus 3 equals 7. Input 2 gives 8 plus 3 equals 11. Input 5 gives 20 plus 3 equals 23. Outputs are 7, 11, and 23.

Exercise 1 answer: Input 3 gives 6 minus 1 equals 5. Input 4 gives 8 minus 1 equals 7. Input 6 gives 12 minus 1 equals 11. Outputs are 5, 7, and 11.

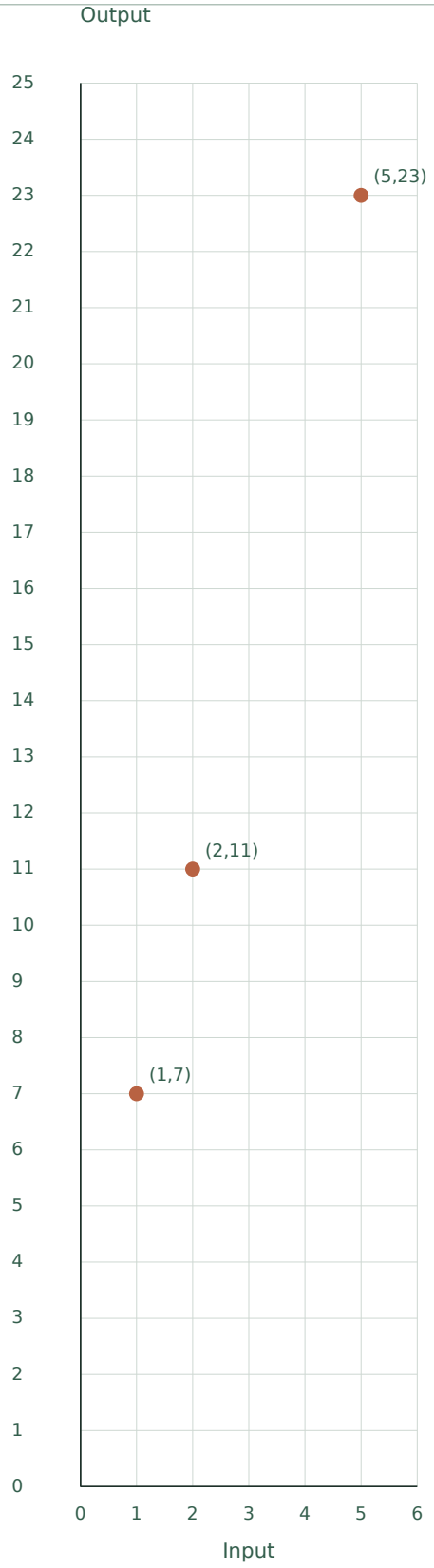
Exercise 1 reasoning: Apply multiplication first, then subtraction, for each row independently.

Exercise 1 check: Reverse one row: add 1 to the output, then divide by 2. For output 11, 11 plus 1 equals 12, and 12 divided by 2 equals 6, matching the input.

Exercise 2 answer: Input 0 gives 0 plus 5 equals 5, then 5 times 3 equals 15. Input 2 gives 7 times 3 equals 21. Input 4 gives 9 times 3 equals 27. Outputs are 15, 21, and 27. Reasoning: Addition occurs before multiplication because the rule states add then multiply. Check: Reverse one row: divide the output by 3, then subtract 5. For output 21, 21 divided by 3 equals 7, and 7 minus 5 equals 2, matching the input.

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Worked example / Optional Coordinate Grid for Worked Example



Optional grid; table is the required record.

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Worked example / Completed Table and Optional Coordinate Grid

Completed worked-example table (rule multiply by 4 then add 3; inputs 1, 2, 5; outputs 7, 11, 23) and an optional grid with plotted points (1,7), (2,11), (5,23). Numerical scales are hypothetical teaching choices.

Input	Rule	Output
1	multiply by 4 then add 3	7
2	multiply by 4 then add 3	11
5	multiply by 4 then add 3	23

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Source rubric / reflection

- [ ] Columns are labeled Input, Rule, and Output.
- [ ] The rule appears once at the top of the Rule column.
- [ ] Each output follows from its input using the stated order of operations.
- [ ] Units are consistent and labeled where used.
- [ ] Handwriting is legible under the baseline-to-midline x-height convention; alternative letter styles are accepted.
- [ ] At least one row is checked by reversing the arithmetic.

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