ZiloAcademy

✨ Grade 5 Maths — Algebraic Thinking ✨

Name: Demo Grade 5 **Date:** 26/11/2026

1. A rule takes a number and always applies the same steps. Input 7 → output 28. Input 8 → output 30. Using the same rule, what is the output for input 1?

2. A function machine multiplies the input by 6, then adds 9. What is the output when the input is 12?

3. Is it true or false that 7x = 98 when x = 14?

4. A rule takes a number and always applies the same steps. Input 7 → output 18. Input 3 → output 10. Using the same rule, what is the output for input 6?

5. If x = 7, what is 5x − 7?

6. A function machine multiplies the input by 4, then adds 11. What is the output when the input is 2?

7. A rule takes a number and always applies the same steps. Input 10 → output 85. Input 3 → output 36. Using the same rule, what is the output for input 10?

8. A function machine multiplies the input by 5, then adds 1. What is the output when the input is 12?

9. Is it true or false that $3x = 12$ when $x = 5$?

10. A rule takes a number and always applies the same steps. Input 7 → output 24. Input 6 → output 21. Using the same rule, what is the output for input 2?