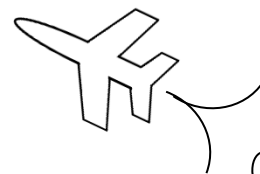


Math on the Fly!



NAME: _____ DATE: _____

Repeating Patterns and Ones Digit Problems

For problems 1–4, each pattern repeats in a loop.
Find the indicated term in the loop.

1. A, B, C, D, E, A, B, C, D, E... Find the 76th letter
2. \triangle , \square , \bigcirc , \triangle , \square , \bigcirc ... Find the 80th shape
3. $\frac{6}{7} = .857142857142...$ Find the 88th digit of the decimal
4. \leftarrow , \uparrow , \rightarrow , \downarrow , \leftarrow , \uparrow , \rightarrow , \downarrow ... Find the 92nd sign

State the digit in the ones place of the answer of each math problem.

- | | |
|---|---|
| 5. $27,196 \times 42,453 \times 19,854$ | 6. $7,458 \times 2,432 \times 943 \times 7,009$ |
| 7. $1,698,742 \times 9,624,849$ | 8. $89,234^0 \times 20,387^2$ |

State the digit in the ones place of the answer of each math problem.
Clue: The ones digit of the powers follow a loop.


- | | | | |
|-----------------------------|----------------------------|--------------|--------------|
| 9. 2^{23} | 10. 3^{30} | 11. 7^{28} | 12. 8^{41} |
| 13. $5^{99} \times 6^{100}$ | 14. $9^{12} \times 4^{18}$ | | |

SOLUTIONS

1. 76th letter = A

2. 80th shape =

3. 88th digit = 1

4. 92nd sign = 

5. Ones digit = 2

6. Ones digit = 2

7. Ones digit = 8

8. Ones digit = 9

9. Ones digit = 8

10. Ones digit = 9

11. Ones digit = 1

12. Ones digit = 8

13. Ones digit = 0

14. Ones digit = 6