Name: _____ Date: _____

Multiplying and Dividing by Powers of 10

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 1 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $76 \times 10^3 =$ _____
2. $39 \times 10^3 =$ _____
3. $94 \times 10^2 =$ _____
4. $98 \times 10^3 =$ _____
5. $97 \times 10^2 =$ _____
6. $45 \times 10^2 =$ _____

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $72.6 \times 10 =$ _____
8. $28.56 \times 1{,}000 =$ _____
9. $99.82 \times 1{,}000 =$ _____
10. $78.15 \times 10^2 =$ _____
11. $25.14 \times 10^1 =$ _____
12. $44.27 \times 10^3 =$ _____

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $9{,}742 \div 10^1 =$ _____
14. $93.4 \div 10^1 =$ _____
15. $6{,}813 \div 100 =$ _____
16. $8{,}698 \div 100 =$ _____
17. $36.4 \div 10^1 =$ _____
18. $174 \div 10 =$ _____