Name: _____ Date: _____

Multiplying and Dividing by Powers of 10

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 3 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. $11 \times 10^3 =$ _____
2. $70 \times 10^2 =$ _____
3. $37 \times 10^2 =$ _____
4. $39 \times 10^1 =$ _____
5. $80 \times 10^1 =$ _____
6. $3 \times 10^1 =$ _____

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

7. $13.65 \times 10 =$ _____
8. $44.3 \times 1{,}000 =$ _____
9. $99.2 \times 10^3 =$ _____
10. $75.6 \times 1{,}000 =$ _____
11. $26.78 \times 10^1 =$ _____
12. $18.73 \times 1{,}000 =$ _____

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

13. $38.2 \div 1{,}000 =$ _____
14. $87.2 \div 100 =$ _____
15. $84.2 \div 10^1 =$ _____
16. $91.7 \div 10^3 =$ _____
17. $3{,}751 \div 10 =$ _____
18. $9{,}564 \div 1{,}000 =$ _____