

Additional Practice 5.7

NAME _____

Module 5 Decimal Operations, Exponents, and Powers
Lesson 7 Scientific Notation

Write as a power of 10.

1. 10,000,000
 10^7

2. 1,000
 10^3

3. 0.000001
 10^{-6}

4. 0.0001
 10^{-4}

Evaluate.

5. 10^{-7}
0.0000001

6. 10^6
1,000,000

7. 10^{-5}
0.00001

8. 10^{10}
10,000,000,000

Multiply.

9. 3.8×10^8
380,000,000

10. 454×10^{-3}
0.454

11. 5006×10^{-5}
0.05006

12. 0.0031×10^6
3,100

Write in expanded form.

13. 0.655
 $6 \times 10^{-1} + 5 \times 10^{-2} + 5 \times 10^{-3}$ or
0.6 + 0.05 + 0.005

14. 7.2302
 $7 \times 10^0 + 2 \times 10^{-1} + 3 \times 10^{-2} +$
 2×10^{-4} or 7 + 0.2 + 0.03 + 0.0002

Is the expression written in scientific notation? If not, write it in scientific notation.

15. 812×10^{-11}
No: 8.12×10^{-9}

16. 10×10^5
No: 1.0×10^6

17. The size of a proton is about 10^{-15} m. Write this number in standard form.

0.000000000000001 m

18. The orbital distance of Saturn from the sun is about 1,400,000,000 km. Write this number in scientific notation.

1.4×10^9 km

Write each expression as a number in standard form.

19. $(3.0 \times 10^{-4}) + (5.4 \times 10^{-3})$
 0.0057

20. $(6.2 \times 10^5) - (9.0 \times 10^4)$
 $530,000$