Warm Up

11/7

Rewrite in decimal form.

1.
$$3.79 \times 10^5$$

2. 2.5×10^{-2}

3. 8.44 × 10¹

5.
$$3.589 \times 10^{-3}$$

6. 9.1187×10^{0}

7.
$$1.0056 \times 10^{-5}$$

8. 7.2658746×10^8

726,587,460.0

Rewrite in scientific notation.

Rewrite in decimal form.

2.
$$2.5 \times 10^{-2} = 0.025$$

4.
$$6.5393 \times 10^4 = 65,393$$

6.
$$9.1187 \times 10^{\circ}$$
 = 9.1187

7.
$$1.0056 \times 10^{-5} = 0.000010056$$

Extra Practice

Rewrite in scientific notation.

$$7.960.000.000 = 7.96 \times 10^{3}$$
 $0.007485 = 7.485 \times 10^{-3}$
 $45.668 = 4.5668 \times 10^{4}$
 $998.653 = 9.98653 \times 10^{2}$
 $0.0000056388 = 5.6388 \times 10^{-6}$

$$63,000,000 = 6.3 \times 10^{7}$$
 $0.0602 = 6.02 \times 10^{-2}$
 $22,078,600 = 2.20786 \times 10^{7}$
 $0.00007,0005 = 7.0005 \times 10^{-5}$
 $64.3 = 6.43 \times 10^{7}$

What Is Special About a Radioactive Cat?

Choose the correct answer for each exercise and circle the letter pair next to it. Write the uppercase letter in the box containing the lowercase letter.

In Exercises 1-2, choose the number that is written in scientific notation.

- 1. $r \cdot Y = 34.5 \times 10^5$
- $m \cdot E = 3.45 \times 10^6$
- $y \cdot P = 0.345 \times 10^7$

- 2. **b** · **G** 0.77×10^{-3}
- $1 \cdot R = 7.7 + 10^{-4}$
- $s \cdot L 7.7 \times 10^{-4}$

In Exercises 3-6, find the value of π .

- **3.** $94,000,000 = 9.4 \times 10^n$
- **4.** $555,500,000,000 = 5.555 \times 10^n$
- **5.** $0.00006 = 6 \times 10^n$
- **6.** $0.0000000000375 = 3.75 \times 10^n$

- n · O 8 e · A 7
- k · C 10
- i•I 11
- j · G -11 $\mathbf{w} \cdot \mathbf{S} = 4$
- y E -5 f · U -12

p · R 0.00038

w·I 380,000

o · D 38,000

In Exercises 7-12, write the number in decimal form.

- **7.** 3.8×10^5
- 8. 3.8×10^{-5}
- **9.** 3.80×10^7
- 10. 6.25×10^4
- 11. 6.25×10^{-3}
- 12. 6.25×10^{-8}

15. 0.00000072

16. 41,900,000

17. 0.00419

14. 7,200,000,000,000

18. 0.0000000000419

- r · A 38,000,000
- d·L 3,800,000
- **b** T 0.000038
- a · A 0.000000625
- v·M 625,000
- z·S 0.00625
- n · E 62,500 **R-H** 0.0000000625
- h.L 0.00062

In Exercises 13-18, write the number in scientific notation.

13. 72,000

- $q \cdot F = 7.2 \times 10^{10}$
 - $f \cdot S = 7.2 \times 10^{12}$

 - a · I 7.2×10^4
 - $v \cdot L = 4.19 \times 10^{-3}$

 - $1 \cdot R \quad 4.19 \times 10^{-10}$
 - $c \cdot S = 4.19 \times 10^6$
- $d \cdot H \cdot 4.19 \times 10^7$ $h \cdot E = 4.19 \times 10^{-11}$

 $q \cdot W 7.2 \times 10^5$

 $0 \cdot N 7.2 \times 10^{-7}$

 $t \cdot D 7.2 \times 10^{-6}$

 $x \cdot T = 4.19 \times 10^{-5}$

In Exercises 19-22, write the number in scientific notation.

19. 22.2×10^3

- $p \cdot 0 = 2.22 \times 10^5$
- 11.T 2.22×10^7

20. 0.222×10^8

- $t \cdot F = 2.22 \times 10^4$
- 10° 2.22 × 10^{9}

21. 0.54×10^{-4}

- $g \cdot L = 5.4 \times 10^{-6}$
- $u \cdot P = 5.4 \times 10^{-16}$

22. 54×10^{-15}

- $q \cdot H = 5.4 \times 10^{-14}$
- 5.4×10^{-5}

k 1 u v \mathbf{w} x У j m n 0 p q T C gh



Converting Between Standard and Scientific Notation (at least 20 minutes)

Homework

Finish classwork