

1.1 Place Value Patterns

Use a place value chart to answer the question.

1. What number is 10 times as great as 4,000?

2. What number is $\frac{1}{10}$ of 8,000?

3. 10,000 is 10 times as great as what number?

4. 70 is $\frac{1}{10}$ of what number?

5. Complete the table.

Number	10 times as great as the number	$\frac{1}{10}$ of the number
30		
600		
9,000		
20,000		

6. **YOU BE THE TEACHER** Your friend says 500 is 10 times as great as 5,000. Is your friend correct? Explain.

1.2 Place Value with Whole Numbers

7. Write the number in two other forms.
Standard form: 456,701
Word form:
Expanded form:

8. Write the number in two other forms.

Standard form:

Word form: Eight million, sixty thousand, five hundred seventy-three

Expanded form:

9. Compare the values of the 4s in the number 900,441,358.

10. Write the values of the 6s in the number 96,672.

Compare.

11. $83,802 \bigcirc 83,082$

12. $2,498,576 \bigcirc 2,477,583$



1.3 Patterns and Powers of 10

13. Write 10×10 as a power.

Find each product. Use patterns to help.

14. $4 \times 10 = \underline{\hspace{2cm}}$

15. $3 \times 10 = \underline{\hspace{2cm}}$

16. $7 \times 10 = \underline{\hspace{2cm}}$

$4 \times 100 = \underline{\hspace{2cm}}$

$3 \times 100 = \underline{\hspace{2cm}}$

$7 \times 100 = \underline{\hspace{2cm}}$

$4 \times 1,000 = \underline{\hspace{2cm}}$

$3 \times 1,000 = \underline{\hspace{2cm}}$

$7 \times 1,000 = \underline{\hspace{2cm}}$

$4 \times 10,000 = \underline{\hspace{2cm}}$

$3 \times 10,000 = \underline{\hspace{2cm}}$

$7 \times 10,000 = \underline{\hspace{2cm}}$

Find the value of the expression.

17. 10^5

18. 8×10^1

19. 7×10^4

20. 3×10^5

Rewrite the number as a whole number multiplied by a power of 10.

21. 5,000

22. 600,000

23. 90

1.4**Decimals to Thousandths**

Write the decimal as a fraction.

24. 0.062

25. 0.008

26. 0.195

Write the fraction as a decimal.

27. $\frac{2}{1,000}$

28. $\frac{37}{1,000}$

29. $\frac{409}{1,000}$

30. 0.7 is 10 times as great as what number?

31. 0.04 is $\frac{1}{10}$ of what number?

1.5**Place Value with Decimals**

Write the number in two other forms.

32. Standard form:

Word form:

Expanded form: $5 \times 1 + 3 \times \frac{1}{10} + 8 \times \frac{1}{100} + 4 \times \frac{1}{1,000}$

33. Standard form: 2.059

Word form:

Expanded form:

34. Compare the values of the 5s in the number 1.055.

35. Compare the values of the 8s in the number 6.884.



1.6 Compare Decimals

Compare.

36. $15.891 \bigcirc 15.791$

37. $8.205 \bigcirc 8.25$

38. $3.600 \bigcirc 3.6$

Order the decimals from least to greatest.

39. 7.008, 7.09, 7.180

40. 50.426, 50.42, 50

41. **Modeling Real Life** Newton weighs a treat at the pet store. He says it weighs less than 0.519 ounce but more than 0.453 ounce. Which treats could he have weighed?



Treat	Weight (ounce)
Yogurt pretzel	0.408
Blueberry waffle	0.512
Peanut butter	0.459
Sandwich cookie	0.591



1.7 Round Decimals

Round the number to the place of the underlined digit.

42. $9.\underline{5}14$

43. $1.0\underline{2}7$

44. $\underline{8}.469$

45. $\underline{3}2.501$

46. Round 0.176 to the nearest hundredth.

47. Round 6.538 to the nearest tenth.

48. Round 7.425.

Nearest whole number: _____

Nearest tenth: _____

Nearest hundredth: _____

49. Round 2.108.

Nearest whole number: _____

Nearest tenth: _____

Nearest hundredth: _____