

## Use 3 Digits



- 1 Write all the whole numbers using the digits 3, 6, and 8 using each digit once (and only once) in each number.

**368    386    638    683    836    863**

- 2 Use the digits 3, 6, and 8 to make numbers with one or two digits after the decimal point. Use each digit once (and only once) in each number. Make as many different numbers as you can.

**3.68, 36.8, 3.86, 38.6**

**6.38, 63.8, 6.83, 68.3**

**8.36, 83.6, 8.63, 86.3**

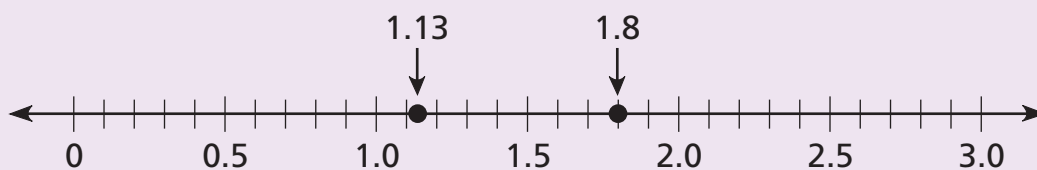
- 3 How can you be sure you found all the numbers?



**Answers will vary. Make an organized list. Each ordering of the three digits is used twice, because there are two possible locations for the decimal point.**

You can use a number line to compare and order decimals.

**Example 1** Compare 1.13 and 1.8.



- 1.13 is to the left of 1.8, so 1.13 is less than 1.8.  $1.13 < 1.8$
- 1.8 is to the right of 1.13, so 1.8 is greater than 1.13.  $1.8 > 1.13$

open number line>

7.80

open number line>

1

number line>

er line>



Order from least to greatest.

2.14, 2.04, 2.41



Order from greatest to least.

0.45, 0.36, 1.4, 0.60

# Making Decimal Numbers Instructions

## How to Play the Game

1 Both players roll a number cube to assign the  $<$  and  $>$  symbols. The player who rolls lowest gets  $<$ . The player who rolls highest gets  $>$ . Each player records his or her symbol in all of the circles on their page.



2 One player rolls the number cube two or three times to get the digits in the goal number. Players record the digits in order as they are rolled.



3 The second player rolls the number cube two or three times to find the digits in the other number. Each player puts the digits in any order and records the number on the page.

4 Each player compares his or her number to the goal number. If the relationship between the numbers matches the symbol in the circle, the player gets a point and circles the  $\checkmark$ . If the relationship doesn't match, the player doesn't get a point and circles the  $\times$ .

5 The player with the most points (circled  $\checkmark$ s) after 5 rounds wins.

# Making Decimal Numbers

ARRANGE TO FIT THE  
JECT AND SUMMARIZ  
BOTTOM OF THE

ers in

$$4 > 1$$

$$2 < 6$$

Goal: 2 .



Number: 2 .

> or <  
Point?

white space for each row>

Goal: 4 .



Number: 4 .

> or <  
Point?

white space for each row>

Goal: 1 .



Number: 1 .

> or <  
Point?

white space for each row>

Goal: 6 .



Number: 6 .

> or <  
Point?

white space for each row>

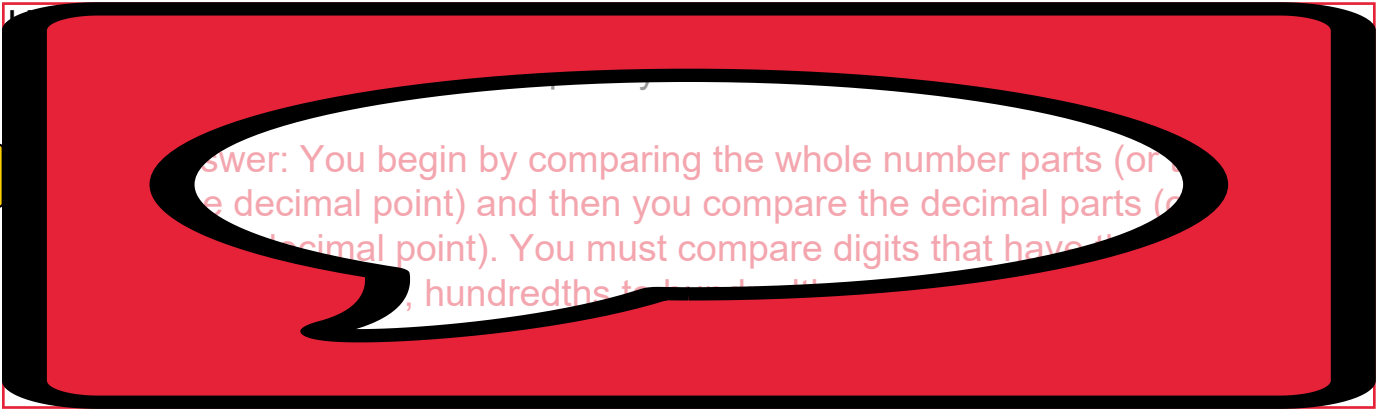
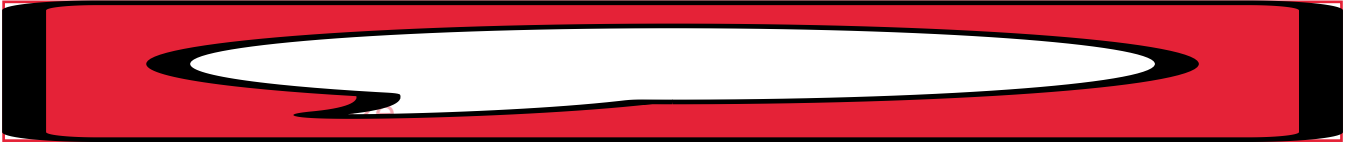
Goal: 3 .



Number: 3 .

> or <  
Point?

white space for each row>



...THE BOTTOM OF THE GAME BOARD.

Answer: You begin by comparing the whole number parts (or the decimal point) and then you compare the decimal parts (starting at the decimal point). You must compare digits that have the same place value, tenths to tenths, hundredths to hundredths, and so on.





## Comparing and Ordering Decimals

Write the numbers in order from least to greatest.

1 1.23 2.13 21.3 \_\_\_\_\_

2 32.1 23.1 1.31 \_\_\_\_\_

3 13.1 12.3 2.31 \_\_\_\_\_

4 3.12 3.21 31.2 \_\_\_\_\_

Write  $>$ ,  $<$ , or  $=$  to complete the number sentence.

12.02  21.01

30.6  30.42

4.5  4.52

6.002  5.9

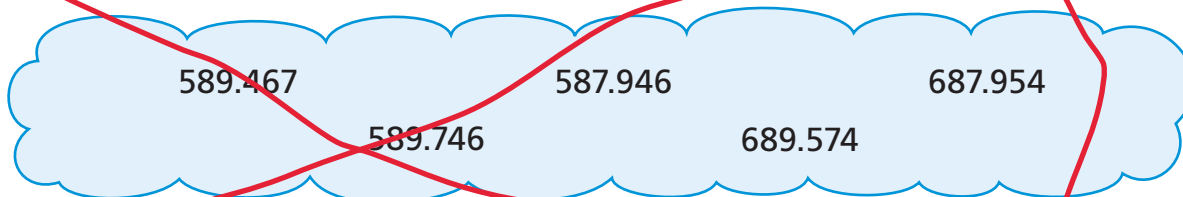
72.9  72.90

28.070  28.70

11 9.8  9.10

12 64.321  64.32

15 Write the numbers in order from least to greatest



Circle the smallest number in each set.



3.2      3.02      3.20



9.98      8.98      9.89

16 14.602      14.61      14.59

17 101.2      10.12      1.012

18 45.901      45.19      45.2

19 3.2      3.14      3.015



20 Keith said that 7.445 is larger than 7.45 because 7.445 has more digits to the right of the decimal point. Is he correct? Explain.

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21 **Challenge** Terrell ran the 40-yard dash in 4.6 seconds. His teammate Troy ran it in 4.39 seconds.

Who was faster? Explain how you know.

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What is the difference between the two times?

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128 one hundred twenty-eight      CXXVIII       $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

## Comparing and Ordering Decimals

Give many real-world examples that would require you to explain.

Give any real-world example that would require you to explain.