# Ordering Decimals

1. What is the value of the digit '7' in each of these numbers?
   a. 0.7
   b. 0.703
   c. 7.03
   d. 3.07
   e. 0.007
   f. 0.0037
2. Place the correct symbol, =, < or >, between the pairs of numbers.
   a. 0.1 0.01
   b. 0.01 0.1
   c. 0.01 0.001
   d. 2.56 2.65
   e. 3.56 2.56
   f. 2.56 2.461
   g. 19.0 19.00
   h. 19.00 19
   i. 45.01 45.2
   j. 45.2 45.02
   k. 45.2 45.20
   l. 185.7 182.7
   m. 1000 999.9
   n. 1000 1000.1
3. Write each set of numbers out in ascending order.
   a. 3.6, 3.06, 3.006, 3.1, 3.02
   b. 0.01, 0.23, 0.03, 0.3, 0.2, 0.21
   c. 1.75, 0.5, 0.75, 0.25, 1.25, 1.5
   d. 1.058, 1.5, 1.512, 1.55, 1.05
   e. 9.2, 8.6, 3.1, 2.7, 4.3, 5.9
4. Write each set of numbers out in descending order.
   a. 1.7, 0.8, 1.08, 1.8, 0.7, 1.07
   b. 0.4047, 0.4065, 0.4087, 0.4, 0.5
   c. 3.1, 3.109, 3.01, 3.19
   d. 10.12, 10.102, 10.201, 10.21, 10.121, 10.212
   e. 7.35, 7.5, 7.03, 7.53, 7.305, 7.3055, 7.535, 7.033, 7.303
5. You are given the digits 2, 4, 6, 0 and a decimal point. Using everything only once, what are the largest and the smallest numbers you can make?
6. A shop makes some money each week selling doughnuts. Write the weeks in order of money made, from most to least.

| | |
|---|---|
| Week 1 | £56.05 |
| Week 2 | £57.23 |
| Week 3 | £54.38 |
| Week 4 | £59.72 |
| Week 5 | £63.72 |
| Week 6 | £41.18 |
| Week 7 | £51.10 |
| Week 8 | £60.04 |

7. *"A number with 6 hundredths is always smaller than a number with 7 hundredths."*

   Is this statement true? Explain your reasoning.
8. *"2.403 is greater than 2.43 because it has more decimal places."*

   Is this statement true? Explain your reasoning.

Answers

1. a) 7 tenths b) 7 tenths c) 7 units d) 7 hundredths e) 7 thousandths
f) 7 ten thousandths

2.

a. 0.1 > 0.01
b. 0.01 < 0.1
c. 0.01 > 0.001
d. 2.56 < 2.65
e. 3.56 > 2.56
f. 2.56 > 2.461
g. 19.0 = 19.00
h. 19.00 = 19
i. 45.01 < 45.2
j. 45.2 > 45.02
k. 45.2 = 45.20
l. 185.7 > 182.7
m. 1000 > 999.9
n. 1000 < 1000.1

3.
a) 3.006, 3.02, 3.06, 3.1, 3.6
b) 0.01, 0.03, 0.2, 0.21, 0.23, 0.3
c) 025, 0.5, 0.75, 1.25, 1.5, 1.75
d) 1.05, 1.058, 1.5, 1.512, 1.55
3) 2.7, 3.1, 4.3, 5.9, 8.6, 9.2

4.
a) 1.8, 1.7, 1.08, 1.07, 0.8, 0.7
b) 0.5, 0.4087, 0.4065, 0.4047, 0.4
c) 3.18, 3.109, 3.1, 3.01
d) 10.212, 10.21, 10.201, 10.121, 10.12, 10.102
e) 7.535, 7.53, 7.5, 7.35, 7.3055, 7.305, 7.303, 7.033, 7.03

5. Largest = 642.0 smallest 0.246

6. week 5, week 8, week 4, week 2, week 1, week 3, week 7, week 6

7. Not true. For example you could have 0.96 and 0.27.

8. Not true. 2.43 has a 3 in the hundredths column, whereas 2.403 has nothing in the hundredths column, therefore 2.43 is bigger