

Comparing and ordering decimals to thousandths

CURRICULUM ALIGNMENT

NUM.PVT.4

investigate how decimals and percentages (and fractions) can be compared, ordered and expressed in related terms.

INTERACTIVES

Place Value Chart (Sliding Digits) · challenge, display

Drag Sort · challenge

WHAT THIS LESSON TEACHES

To compare and order decimals to thousandths, line up the decimal points and compare digits starting from the left. The first column that differs decides which number is larger.

→ 6 beats 0.405 because 6 tenths is more than 4 tenths.

→ 07 and 0.070 are exactly the same amount.

MODEL THIS ON THE BOARD

ORDERING DECIMALS FROM A CLASSROOM MEASUREMENT

- 1 Line up all the decimals so their points are in one column.
- 2 Start at the leftmost place and compare the digits in each column until they differ.
- 3 Write the numbers in order from smallest to largest.

ANSWER KEY

Scaffold: visual check on the page

Q1: 0.6 m (red)

Q2: 0.044 m, 0.4 m, 0.404 m, 0.44 m

Q3: Yes (same)

Q4: 0.05, 0.45, 0.5, 0.505

Q5: equal

Q6: 0.09, 0.099, 0.9, 0.909

a) **Never** — 0.6 is larger than 0.405 even though it has fewer digits.

b) **Always** — This is the rule for comparing decimals to thousandths.

c) **Always** — 5 tenths is more than 4 tenths.

d) **Never** — 0.07 and 0.070 are exactly the same.

EXTENSION SHEET · STRETCH ANSWERS

S1: $2.963 < 4.8 < 5.83 < 8.404$

S2: $7.15 < 9.44 < 9.66$

S3: $1.83 < 4.03 < 7.02$

S4: $4.88 < 6.89 < 9.4$

S5: $4.8 < 7.32 < 9.84$