

Comparing two decimals

WHAT THIS LESSON TEACHES

To compare two decimals, line up the place values and **read each digit from left to right**. The first digit that differs decides which is bigger.

→ **5.83** vs **5.79**: units the same; tenths $8 > 7$, so $5.83 > 5.79$.

→ **0.4** vs **0.40**: same value (the trailing zero adds no quantity).

ANSWER KEY

a) $0.6 > 0.45$ — same units, 6 tenths beats 4 tenths.

b) $0.7 > 0.07$ — 7 tenths is ten times larger than 7 hundredths.

c) $1.4 > 1.34$ — same units, 4 tenths beats 3 tenths (even though 1.34 has more digits).

Q1: $4.8 < 7.32 < 9.84$

Q2: $7.15 < 9.44 < 9.66$

a) **Never** — 0.45 has more digits than 0.6 but is smaller. Compare digit-by-digit from the left.

b) **Always** — Trailing zeros after the decimal point don't change the value.

c) **Always** — $0.7 = 0.70 = 0.700$ — same value, different precision.

d) **Never** — 1.45 starts with 1 and so does 1.5; the longer one (1.45) is the smaller.

e) **Always** — $0.10 = 10$ hundredths; $0.09 = 9$ hundredths.

f) **Never** — Trailing zeros after the point are placeholders, not extra value.

EXTENSION SHEET · STRETCH ANSWERS

S1: $6.26 < 6.89 < 7.753 < 9.4$

S2: $4.88 < 6.89 < 9.4$

S3: $1.83 < 4.03 < 7.02$