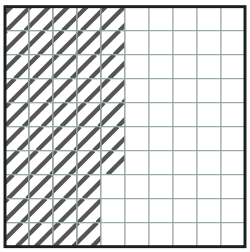
How Decimals Work

Tenths and hundredths, and how to add, subtract and multiply them.

1. What the digits mean

ones		tenths	hundredths
3	.	4	7

In **3.47** the 4 is 4 tenths and the 7 is 7 hundredths. Read it as "three and forty-seven hundredths".



One whole cut into 100 parts. Each column is one **tenth** (0.1) and each small square is one **hundredth** (0.01). Here 4 full columns and 7 more squares are shaded: **0.47**.

2. Add and subtract: line up the decimal points

$$\begin{array}{r} 4.25 \\ +\ 1.8 \\ \hline 6.05 \end{array} \qquad \begin{array}{r} 6.3 \\ -\ 2.75 \\ \hline 3.55 \end{array}$$

Write the numbers so the points sit in one column. Fill empty places with a 0 (6.3 is the same as 6.30). Then add or subtract as with whole numbers and bring the point straight down.

3. Multiply by a whole number

2.4 × 3

Multiply as if there were no point: **24 × 3 = 72**.
2.4 has one digit after the point, so the answer does too: **7.2**.
Check: 2.4 is a little more than 2, and 2 × 3 = 6, so 7.2 makes sense.

4. Comparing decimals

Compare the tenths first, then the hundredths. **0.5 is greater than 0.45** because 5 tenths is more than 4 tenths. Writing 0.5 as 0.50 makes it easier to see: 50 hundredths is more than 45 hundredths.

5. Try it

1.5 + 2.25 = _____ **4.0 − 1.6 =** _____ **3.2 × 4 =** _____

Answers: 3.75, 2.4, 12.8