

Lesson 27 **NUMBER****Division with decimal answers: sharing what's left**

CURRICULUM ALIGNMENT

NUM.OPS.4

build upon, select and make use of a range of operation strategies.

NUM.PVT.4

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

INTERACTIVES Equal Groups (Sharing) · challenge, display, explore

WHAT THIS LESSON TEACHES

When one whole cannot be shared equally, break the leftover into ten tenths and share those too; any tenths still left break into hundredths, giving a decimal answer with nothing wasted.

→ 9 shared by 4 is 2.25

→ $5 \div 8 = 0.625$

MODEL THIS ON THE BOARD

SHARING 9 CHOCOLATE BARS AMONG 4

- 1 Write the bus-stop for $9 \div 4$.
- 2 4 fits into 9 two times (2), leaving remainder 1.
- 3 Place the decimal point and turn the 1 into 10 tenths.
- 4 4 fits into 10 two times (2 tenths), leaving 2 tenths.
- 5 Turn 2 tenths into 20 hundredths; 4 fits exactly 5 times.
- 6 The fair share is **2.25** bars each.

ANSWER KEY

Scaffold: visual check on the page

Q1: 1.4 cakes

Q2: 1.5 muffins

Q3: 2.6 pies

a) Always : That is the exact method used to turn a remainder into the next decimal place.

b) Sometimes : It does when there is a remainder, but not when the division is exact.

c) Always : Lining the points up keeps every place value correct.

d) Never : The whole point of the method is that nothing is left over or thrown away.

EXTENSION SHEET · STRETCH ANSWERS

S1: 452

S2: 150

S3: 129

S4: €196

S5: 185