

Direct proportion and the unitary method

WHAT THIS LESSON TEACHES

Two quantities are in direct proportion when doubling one doubles the other - more items cost proportionally more. Use the unitary method: divide to find the price of one then multiply up.

→ 3 pencils cost 90c so 6 cost 1.80.

→ 4 apples for 1.20 so one is 30c and seven cost 2.10.

MODEL THIS ON THE BOARD

UNITARY METHOD FOR NINE BUNS

① Nine buns cost 4.50 so divide 4.50 by 9 to find one bun costs 50c.

② Then multiply 50c by 4 to find four buns cost 2.00.

ANSWER KEY

Scaffold: visual check on the page

Q1: €0.30

Q2: €0.40

Q3: €0.50; €2.00

Q4: 400 km

Q5: €2.10

a) **Always** — Doubling the items doubles the cost in direct proportion.

b) **Always** — Divide total cost by number of items to get the unit price.

c) **Never** — Ten buns would cost 4.00 as the unit price is 40c.

d) **Always** — Once you have the unit price you can multiply for any quantity.

EXTENSION SHEET · STRETCH ANSWERS

S1: €120

S2: €50

S3: €27