TEACHER RESOURCE BOOK · MATHS FOR 6TH CLASS

Lesson 38 NUMBER

Problem-solving with discounts and increases

WHAT THIS LESSON TEACHES

An amount taken off the original price, usually written as a percentage. A 30% discount means you take 30% off and pay the rest. The same idea works for increases like service added.

→ A €50 coat with 30% off: the saving is 30% of €50 = €15, so you pay €35.

→ A €200 bill with 10% added: the extra is 10% of €200 = €20, so you pay €220.

MODEL THIS ON THE BOARD

WORK OUT THE SALE PRICE

1. Start with the original price of €60.
2. Find 20% of €60: first 10% is €6, so 20% is €12.
3. Subtract the saving from the original: €60 minus €12.

ANSWER KEY

a) €68

b) €22.50

c) €132

Q1: save €9.75, pay €55.25

Q2: save €2.25, pay €42.75

Q3: extra €16.50, total €126.50

Q4: save €10.50, sale €24.50

Q5: save €60, pay €90

a) Always — 20% of 80 is always 16.

b) Never — The 10% added is on a larger amount so it does not cancel.

c) Always — Discounts are always calculated on the starting price.

d) Always — 25% of 120 is 30, added to 120 makes 150.

EXTENSION SHEET · STRETCH ANSWERS

S1: €217.59 (discount: €38.40)

S2: €295.09 (discount: €158.90)

S3: €161.70 (discount: €69.30)

S4: €78.60 (discount: €52.40)

S5: €112.20 (discount: €19.80)

Investigation: Hunt for the best deal — open-ended; scan pupils' working for valid solution paths rather than a single answer.