

## Problem-solving with discounts and increases

### WHAT THIS LESSON TEACHES

A **discount** subtracts a percentage; an **increase** adds one. Find the percentage part, then take it away or add it on.

→ 20% off €50 →  $20\% = €10$  → pay **€40**.

→ A €30 price up 10% →  $+€3$  → **€33**.

### MODEL THIS ON THE BOARD

**A €45 COAT HAS 20% OFF. WHAT'S THE SALE PRICE?**

① 20% of €45:  $10\% = €4.50$ , so  $20\% = €9$ .

② Subtract the discount:  $€45 - €9 = €36$ .

### ANSWER KEY

**Warm-up:** a) 40 b) 80 c) 16 d) 8

**Q1:** €112.20 (discount: €19.80)

**Q2:** 210

**Q3:** €295.09 (discount: €158.90)

**Q4:** €170

### EXTENSION SHEET · STRETCH ANSWERS

**S1:** €217.59 (discount: €38.40)

**S2:** 21

**S3:** €311.94 (discount: €55.05)

**S4:** €153

**S5:** €161.70 (discount: €69.30)

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