

# Problem-solving with discounts and increases

MODULE 3 · FRACTIONS, DECIMALS AND PERCENTAGES NUMBER

## HOW TO ANSWER TODAY

- **Sale price.** Find the discount (percent of price). Subtract from the original price.  
 $\text{€}60, 20\% \text{ off} \rightarrow 20\% \text{ of } \text{€}60 = \text{€}12 \rightarrow \text{€}60 - \text{€}12 = \text{€}48$
- **Discount / increase.** Work out the percent of the price, then take it off (discount) or add it on (increase).  
 $\text{€}80 \text{ with } 15\% \text{ off} \rightarrow 15\% \text{ of } \text{€}80 = \text{€}12 \rightarrow \text{€}80 - \text{€}12 = \text{€}68$

## STRETCH PROBLEMS

- Niamh spots a winter jacket priced at **€255.99** in the Dunnes Stores sale. There is **15%** off everything at the till that morning. What is the sale price of the jacket?  
 A jacket costs €255.99 before a 15% discount. What is the sale price?
- 140** pupils from 5th class are going on the school tour to the Cliffs of Moher in Clare. **15%** of the pupils have chosen the guided walk along the cliff path. How many pupils have chosen the guided walk?  
 What is 15% of 140?
- Niamh spots a winter jacket priced at **€366.99** in the window of Dunnes Stores on the way home from school. A sign says everything is **15%** off this weekend. What is the sale price of the jacket?  
 A jacket costs €366.99 before a 15% discount. What is the sale price?
- A picnic hamper for the 5th class trip costs **€180** at the local Centra deli. The shop gives the class a **15%** discount because they are ordering for a school event. What is the new price of the hamper?  
 €180 is reduced by 15%. What is the new price?
- Niamh's family are buying a new electric bike for her older brother, priced at **€231.00** in the Cork shop. The shop has a **30%** discount on all bikes this weekend. What is the sale price of the bike?  
 A jacket costs €231.00 before a 30% discount. What is the sale price?

## INVESTIGATE

### Hunt for the best deal

A jacket costs €60. Shop A offers '25% off'. Shop B offers '€20 off'. Shop C offers 'buy one get the second half price' if you buy two. Which is the best value in different situations? Explain.

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