

# Decimals & Percentages

Name:

Date:

**INQUIRY**

**A German shop has 25% off. A Chinese shop has  $\frac{1}{3}$  off. Which is the better deal?**

Discuss with your partner. Write your initial ideas below:

## Key Vocabulary

Term	Definition
Convert	Change between fractions, decimals, and percentages.
Percentage	Parts per hundred. $50\% = 50/100 = 0.5$ .

## Part A — Converting

1. Convert to decimals: (a)  $\frac{3}{4}$  (b)  $\frac{2}{5}$  (c)  $\frac{7}{8}$ . [3 marks]

Show your working:

2. Convert to percentages: (a) 0.35 (b)  $\frac{3}{4}$  (c)  $\frac{17}{20}$ . [3 marks]

Show your working:

**3.** Convert to fractions (simplest form): (a) 60% (b) 0.125 (c) 45%. [3 marks]

Show your working:

## **Part B — Calculations**

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**4.** Find: (a) 15% of 80 (b) 30% of 250 (c) 12.5% of 400. [3 marks]

Show your working:

**5.** German shop: 25% off a 40 euro jacket. Chinese shop:  $\frac{1}{3}$  off a 300 yuan jacket. Calculate each discount. [3 marks]

Show your working:

## **Part C — Challenge**

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**6.** NIS has 450 students. 52% are in middle school. How many? If  $\frac{2}{5}$  of middle schoolers play a sport, how many is that? [3 marks]

Show your working: