Unit 8 · Unitary Method

HARDER PRACTICE QUESTIONS

Full marks 30

Write your answers on separate paper. Show your working: where you can, find the value of one first. The prices on this sheet are made up for the problems.

1 Spot the error [3]

Riya was asked: "8 kg of sugar cost Rs 720. What do 5 kg cost?" She wrote: "$720 \div 5 \times 8 =$ Rs 1152."

i. What did she do wrong?
ii. Find the right answer.
iii. Give a quick check that shows her answer can't be right.

2 Copy and complete [4]

A school buys chairs, all at the same price. Copy and complete the table.

Number of chairs	4	1	7	……	……
Cost (Rs)	6000	……	……	13500	22500

3 Which pack? [3]

A shop sells the same biscuits in three packs: 6 biscuits for Rs 90, 10 biscuits for Rs 140, and 15 biscuits for Rs 240.

i. Find the price of one biscuit in each pack.
ii. Put the packs in order, from the best buy to the worst.

4 From dozens to eggs [3]

Anish paid Rs 540 for 3 dozen eggs.

i. What does one egg cost?
ii. How many eggs can he buy for Rs 375?
iii. How many whole dozen can he buy for Rs 1000, and how much money is left?

5 A day's wage [3]

Abinash is paid Rs 7200 for 6 days' work on a building site. His sister Nitu is paid Rs 1350 a day on the same site.

i. What is Abinash's daily wage?
ii. How many days must he work to earn Rs 18000?
iii. In those days, how much more than him does Nitu earn?

6 Does it work here? [4]

For each, say whether the unitary method gives the answer, and why. Where it does, find the answer.

a. 4 notebooks cost Rs 240. What do 9 notebooks cost?
b. A kettle boils 1 liter of water in 3 minutes. Four such kettles, each with 1 liter, are switched on together. How long until all four boil?
c. Kushal is 12 years old and 150 cm tall. How tall will he be at 24?
d. A tap fills 2 buckets in 6 minutes. How long does it take to fill 5 buckets?

7 Sharing the bill [3]

Five friends go out for momo. 2 plates cost Rs 360. They eat 7 plates and share the bill equally.

i. What is the bill?
ii. How much does each friend pay?
iii. With Rs 2000 between them, how many plates could they have bought?

8 Make your own [3]

Write a short problem from everyday life that is solved by $960 \div 8 \times 5$. Then solve it, and say what each step finds.

9 Think: the big bag or the small ones? [4]

A shop sells rice in 5 kg bags for Rs 600 and in 25 kg bags for Rs 2750. Bags can't be opened.

i. Find the price of 1 kg in each bag.
ii. Sapana needs exactly 30 kg. What is the cheapest way to buy it, and what does it cost?
iii. Her neighbor needs only 20 kg. Which costs less: four small bags or one big bag? Why might the neighbor still choose the big bag?