



## Money problems – Azadur and Samantha

### Objectives

The relevant framework objective is:

- extend written methods to column addition and subtraction of numbers involving decimals.

### Activity description

The pupils worked in groups on adding and subtracting decimals. Azadur's group was given money problems. Samantha's group used inverse operations to check answers.

### Commentary

Azadur's work shows he is confident with written methods for the addition and subtraction of numbers involving decimals to two decimal places.

Samantha's work shows how she has used the inverse operation to check her work.

Both examples are typical of performance at level 4 in Ma2 because both exemplify efficient methods to add and subtract numbers with decimals to two places.

To develop their understanding of decimals both pupils need to work with decimals to three places.



## Items of work

Azadur's group add and subtract numbers involving decimals

Ferry Fares	
Adult	£5.45
Child	£2.75
Car	£15.12
Van	£17.45
Minibus	£19.50

1. Find the difference in cost between the fares for-

a) A van and a minibus?  
 Answer = £2.05

$$\begin{array}{r} \text{£ } 19.50 \\ - \text{£ } 17.45 \\ \hline \text{£ } 2.05 \end{array}$$

b) A car and a van?  
 Answer = £2.33

$$\begin{array}{r} \text{£ } 17.45 \\ - \text{£ } 15.12 \\ \hline \text{£ } 2.33 \end{array}$$

c) A car and a minibus?  
 Answer = £4.38

$$\begin{array}{r} \text{£ } 19.50 \\ - \text{£ } 15.12 \\ \hline \text{£ } 4.38 \end{array}$$

2. The fare for a car and a driver is £20.57. How much change will the driver get from £25? Answer = £4.43

$$\begin{array}{r} \text{£ } 25.00 \\ - \text{£ } 20.57 \\ \hline \text{£ } 4.43 \end{array}$$

3. An adult and 2 children go on board the ferry in a vehicle. The total cost is £28.40. What kind of vehicle are they in?  
 Answer = A van.

$$\begin{array}{r} \text{£ } 5.45 \\ \text{£ } 2.75 \\ \text{£ } 2.75 \\ \hline \text{£ } 10.95 \end{array} \quad \begin{array}{r} \text{£ } 28.40 \\ - \text{£ } 10.95 \\ \hline \text{£ } 17.45 \end{array}$$



Samantha's group use inverse operations to check answers

$$2.24 + 3.35$$

$$\begin{array}{r} 2.24 \\ + 3.35 \\ \hline 5.59 \end{array}$$

Check:

$$\begin{array}{r} 5.59 \\ - 3.35 \\ \hline 2.24 \end{array}$$

$$452.6 - 8.31$$

estimate:  $450 - 9 = 441$

$$\begin{array}{r} 452.60 \\ - 8.31 \\ \hline 444.29 \end{array}$$

Check:

$$\begin{array}{r} 444.29 \\ + 8.31 \\ \hline 452.60 \end{array}$$



## About this entry

Subject: mathematics

Year: 6

Key stage: 2

NC programme of study: Ma2p3i

Attainment target: Ma2

Evidence for: level 4

Framework for teaching mathematics – objectives:

- Extend written methods to column addition and subtraction of numbers involving decimals.