






1)

Calculation	Rounded Calculation	Estimated Answer	Actual Answer
$6999 + 2100$	$7000 + 2000$	9000	9099
$2456 + 7787$	$2000 + 8000$	10 000	10 243
$6149 - 1399$	$6000 - 1000$	5000	4750
$7503 - 1956$	$8000 - 2000$	6000	5547

2) a)

Day of the Week	 Fish	 Meat	 Fruit and Vegetables
Monday	12 000g	25 000g	11 000g
Tuesday	25 000g	20 000g	16 000g
Wednesday	16 000g	7000g	12 000g
Thursday	28 000g	14 000g	27 000g
Friday	7000g	18 000g	14 000g
Approximate Total	88 000g	84 000g	80 000g

b) $25\ 000\text{g} + 20\ 000\text{g} + 16\ 000\text{g} = 61\ 000\text{g}$

c) $\text{Wednesday} = 16\ 000\text{g} + 7000\text{g} + 12\ 000\text{g} = 35\ 000\text{g}$

$\text{Friday} = 7000\text{g} + 18\ 000\text{g} + 14\ 000\text{g} = 39\ 000\text{g}$

$39\ 000\text{g} - 35\ 000\text{g} = 4000\text{g}$

d) The rounded number of vegetables prepared on Friday is 14 000g to the nearest 1000g. This means that approximately 8000g were prepared on Saturday.



- 1) Mikey rounded 135 697 to the nearest 1000 and correctly wrote down 136 000.

However, when rounding 3509 to the nearest 1000, Mikey rounded down to 3000 when he should have rounded up to 4000.

A more accurate approximation would have been $136\ 000 - 4000 = 132\ 000$.

- 2) a) 116 611

- b) Abdul rounded to the nearest thousand.

$$126\ 000 - 10\ 000 = 116\ 000$$

Barry rounded to the nearest ten thousand.

$$130\ 000 - 10\ 000 = 120\ 000$$

Carla rounded to the nearest hundred.

$$126\ 300 - 9700 = 116\ 600$$

Daniel rounded to the nearest ten.

$$126\ 280 - 9670 = 116\ 610$$

- c) Although Daniel's calculation was most accurate, it would not be the quickest to calculate.

Barry's method would be quick to calculate, but is the least accurate.

Abdul's method was relatively close to the correct answer and would have been quick to calculate mentally.

- 1) a) $£14 + £7 + £9 + £3 = £33$

- b) $£33$ per player $\times 20$

$$£33 \times 10 = £330$$

$$£330 \times 2 = £660$$

- c) 20 players in 5 squads = 100 players in total

$$£33 \times 100 = 3300$$

or: $£660$ per squad

$$£660 \times 5 = £3300$$

- d) Original approximation was $£3300$ for the whole academy.

If the plane tickets are now half price, each player's cost is reduced by $£6.90$, which is a saving of approximately $£700$ for the whole academy.

$$£3300 - £700 = £2600$$

Or: The new cost per player is now approximately

$$£7 + £7 + 9 + £3 = £26$$

So the total cost for the academy is $£26 \times 100 = £2600$.

- 2) Investigative question. Multiple possible answers.

