

Sheet 2 – Correcting mistakes

A learner has been asked to write down how she would solve six problems.

Do you agree with her answers?

What mistakes has she made?

Can you correct her mistakes?

Can you see why she has made these mistakes?

1	A car travels 120 miles in 3 hours at a steady speed. How far does it go in 1 hour?	$120 \div 3$
2	A snail moving at a steady speed travels 0.8 miles in 40 hours. How far does it go in 1 hour?	$40 \div 0.8$
3	I buy some apples which cost £1.50 per kilogram. I spend £3.50. What weight do I buy?	$3.50 \div 1.50$
4	I buy some tomatoes which cost £0.90 per kilogram. I spend 30 pence. What weight do I buy?	$90 \div 30$
5	Sam's motorbike does 60 miles per litre. How far can she go on 3 litres?	60×3
6	Clive's car does 20 miles per litre. He only has 0.4 litres left in the tank. How far will he travel before he runs out of petrol?	$20 \div 0.4$

A second learner is trying to explain how to do the last problem.

If you can't decide whether a problem is multiply or divide, then try changing the numbers to easier ones.

Just change the 20 to 6 and the 0.4 to 3. Then it is easy to see that the question should be multiply.

The first learner replies:

I don't think your method works. If you change the numbers, you might change the operation.

Who is right? Why? Write a reply to these learners.