Skillswise

Problem solving with multiplication - answers

1.

Step 1 Read and understand the problem.	A friend is trying to work out her mobile phone costs. She sent 50 text messages at a cost of 12p each. How much has she spent on texting?
Step 2 Work out what calculations you need to do.	Work out the cost of 50 texts at 12p each (50 lots of 12p). You're working in pence, which should be changed into pounds. There is 100p in £1, so convert pence to pounds by dividing by 100.
Step 3 Carry out the calculations and answer the problem.	You might find it easier to do the multiplication by partitioning 12p into 10p and 2p: 50 × 10p = 500p 50 × 2p = 100p So 50 × 12p = 600p 600 ÷ 100 = £6 The cost of texting is £6.
Step 4 Check your answer works.	Change the £6 back to pence by multiplying by 100: 6 × 100 = 600p (£6) Divide 600 by 50 to get the cost of one text message: 600 ÷ 50 = 12 The answer is correct.

2.

Step 1 Read and understand the problem.	Five people had coffee together. The coffee cost £1.10 a cup. What was the total cost?
Step 2 Work out what calculations you need to do.	Try multiplication here. The total cost will be 5 times £1.10.
Step 3 Carry out the calculations and answer the problem.	You might find it easier to partition the £1.10 into £1 and 10p: 5 lots of £1 = £5 5 lots of 10p = 50p So 5 × £1.10 is £5.50. The total cost was £5.50.
Step 4 Check your answer works.	Try adding: £1.10 + £1.10 + £1.10 + £1.10 + £1.10 = £5.50 The answer is correct.