Number- Addition, Subtraction (mental and written)

1. I buy six items costing 76p, 89p, 36p, £1.03, 49p and 97p. I give the shop assistant a £10 note and get £3.46 change. I immediately think the change is wrong. Without doing any calculating, explain why you think I am right.
2. I added the distances I travelled to work for one week. On Monday I travelled 145metres, on Tuesday I travelled 10km, on Wednesday I travelled 25km, on Thursday I travelled 145metres and on Friday I travelled 50km. I entered 145 + 145 + 10 + 25 + 50 into my calculator and I got 375 km. That doesn’t seem right. What have I done wrong? Is using a calculator the best way to solve this problem? Explain your thinking.
3. I have 360 ml of juice in a jug. I add another 450 ml. How much juice is there in the jug now?
4. Solving number puzzles, e.g. Completing number pyramids.

5. My sister is 108cm tall and I am 132cm. I did a subtraction calculation and worked out that I am 36cm taller than my sister. That doesn’t seem right. What do you think I may have done wrong? What is the best way to solve this problem?
6. Ask pupils to carry out calculations where known facts and place value can be used to add and subtract a pair of numbers mentally, e.g. Using knowledge of 62 − 38 to calculate 6200 − 3800 or 6.2 − 3.8.
7. My Christmas credit card bill has just arrived. I have spent £367 on presents, £186.24 on food and £67.82 on decorations. How much have I spent in total?
8. 345 people buy tickets to see a film at the cinema on Friday, 267 watch the film on Saturday and a further 186 watch the film on Sunday. How many people watched the film in total?
9. Sanjay and Eloise are saving to go on holiday. Sanjay has saved £245.67 and Eloise has saved £342.20. How much have they saved in total?
10. The Smith family has saved £675 towards their summer holiday. The cost of the holiday is £2019. How much more do they need to save?
11. At the beginning of a cricket match there were 742 people watching. At tea-time 218 people went home. How many were left?
12. Two adults and two children go to a cinema. Adult tickets cost £5.85 and children's tickets cost £2.85. How much change will they get from a £20 note?
13. Max jumped 2.35 metres on his second try at the long jump. This was 68 centimetres longer than on his first try. How far in metres did he jump on his first try?
14. Would you use column subtraction to work out time intervals? Explain your answer?
15. I buy some items costing £3.76, 89p, £1.05 and £17.49.How much do I spend in total?
16. The measurements of my room are 5.45m, 6.75m, 6m and 4.84m. What is the perimeter of my room?
17. I buy some items costing £14.67. I give the shop assistant a £20 note. What change should I get? How did you work it out?
18. 1 litre of paint covers 11.5 square metres. I paint an area of 5.12 square metres. How much paint do I have left?