Fluency 1

75,302

26,992

99,436

Fluency 2

2,345 + 9,999 = 12,344 This should be calculated mentally (10,000 + 2,345 -1)

23,856 + 2,098 = 25,954. This could be calculated with jottings (23,856 + 2,000 + 100 – 2)

19,992 + 7,368 = 27,360. This could be calculated using a column method.

Fluency 3

The total cost is £579,849

Fluency 4

27,041 – 7,962 = 19,079

71,094 – 8828 = 62,266

60,641 – 6962 = 53,679

Fluency 5

54,329 – 2,481 = 51,848. This could be calculated using column subtraction

10,632 – 997 = 9,635. This should be calculated using a mental method (10,632 – 1,000 + 3)

99,120 – 5,520 = 93,600. This could be calculated using jottings (99,120 – 120 = 99,000 then subtract 5,000 = 94,000 – 400 = 93,600)

10,238 away fans attended

Reasoning 1

Pupils should identify that Jane is correct and all the digits are 2

Modelled DAB Reasoning Responses

D – Jane is correct

A – All the missing digits are 2

B – If you start with the units and look at 7-5, the missing digit is 2. Then 2 + 2 = 4, 2 + 8 = 6, 8 + 2 = 10 so you will have to carry the 10 into the next column – 2 + 4 + 1 = 7.

Reasoning 2

32,716 + 41,918 = 74,634   41,293 + 32,045 = 73,338

Modelled DAB Reasoning Response

D – The statement is correct.

A – 32,716 + 41,918 = 74,634 and 41,293 + 32,045 = 73,338

B – 74,634 is greater than 73,338 because it has more 10,000s

Reasoning 3

Pupil responses should show the answer is sometimes true.

Modelled DAB Reasoning Response

D – Anita's statement is sometimes true.

A – Two 6-digit numbers can equal a 7-digit number but they can also equal a 6-digit number too.

B – for example; 123,456 + 123,456 = 246,912 but 123,456 + 897,345 = 1,020,801

Reasoning 4

Pupil responses should spot Alfie's mistake of subtracting 100 instead of adding .

Modelled DAB Reasoning Response

D – Alfie has made a mistake.

A – At the end of the calculation he has subtracted 100 instead of adding it.

B – He added 100 to 2,900 before he started his working out therefore, he should add 100 to his answer for it to be correct. 51,746 – 2,900 = 48,846

Download our 'DAB' posters to support reasoning in your classroom:

https://www.deepeningunderstanding.co.uk/product/dab-reasoning-posters/

Problem Solving 1

Answers will vary according to the target number generated