

More Addition and Subtraction Unit 1

Problem solving and reasoning questions

Year 3

Add 80 to 263 then subtract 1. How much bigger is your answer than 263?

Use number cards 9, 1, 5 and 7. How many additions of near multiples can you create?

Mystery number

What ONE number makes this sentence true?

$$76 - ? = 18 + ?$$

How many times will you add 19 to 24 to reach 100? What number will you start with if you add 18 repeatedly and reach 100 exactly?

These questions should be provided for children to do once the unit has been completed. They assess the children's mastery of the skills and concepts in this unit.

Year 4

Complete this sequence by adding 198 each time.

169, 367, ____, 763, ____, ____

What needs to be subtracted from 985 to get 587?

Harry subtracted 59 from 354 and got 293. Explain what he did wrong.

Complete the number sentences:

$$438 + 39 = \underline{\quad}$$

$$356 - \underline{\quad} = 307$$

$$\underline{\quad} - 198 = 314$$

These questions should be provided for children to do once the unit has been completed. They assess the children's mastery of the skills and concepts in this unit.

More Addition and Subtraction Unit 1

Problem solving and reasoning answers

Year 3

Add 80 to 263 then subtract 1. How much bigger is your answer than 263? The answer, 342, is 79 bigger. Some may answer 81, simply adding the 80 and 1.

Use number cards 9, 1, 5 and 7. How many additions of near multiples can you create?

These occur when either the 1 or the 9 digit (or both) are in the 1s place:

79 + 51, 97 + 51, 59 + 71, 95 + 71, 57 + 91, 75 + 91, 17 + 59, 15 + 79, 57 + 19, 75 + 19.

NB Children may include answers with the numbers the other way round, e.g. 51 + 79 rather than 79 + 51 or include both.

Mystery number

What ONE number makes this sentence true? 29.

$$76 - 29 = 18 + 29$$

Best found by trial and improvement, although some children may work out that 29 is half the difference between 76 and 18.

How many times will you add 19 to 24 to reach 100? 4 times, the sequence is: 24, 43, 62, 81, 100.

What number will you start with if you add 18 repeatedly and reach 100 exactly? You would have to start at 10 and add 18 five times: 10, 28, 46, 64, 82, 100.

These questions should be provided for children to do once the unit has been completed. They assess the children's mastery of the skills and concepts in this unit.

Year 4

Complete this sequence by adding 198 each time.

169, 367, 565, 763, 961, 1159.

What needs to be subtracted from 985 to get 587? 398.

Harry subtracted 59 from 354 and got 293. Explain what he did wrong. He has adjusted 'the wrong way'. $354 - 60 = 294$. Since 59 is being subtracted he should add 1 back to get to the answer (295), instead he has subtracted 1 more.

Complete the number sentences:

$$438 + 39 = 477$$

$$356 - 49 = 307$$

$$512 - 198 = 314$$

These questions should be provided for children to do once the unit has been completed. They assess the children's mastery of the skills and concepts in this unit.