

# Addition and subtraction – reasoning.

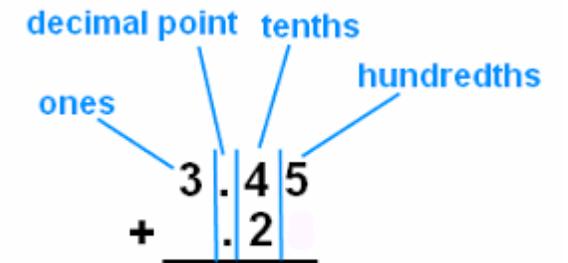
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Today we have prepared for you four different style questions. You will need to do good thinking , so, get comfortable and get started. If you get stuck, go back to your old work from this week because you will find some good strategies there.

# True or false...

In order to prove your answer you need to work this out for yourself. I would advise you to use the column method here. Make sure that all digits are in the correct place otherwise it won't work. Think carefully about how you will regroup and exchange because usually this is where people get it wrong.

And remember, the decimal point must always be aligned!



1. Are these number sentences true or false?

$$6.17 + 0.4 = 6.57$$

$$8.12 - 0.9 = 8.3$$

Give your reasons.

# Hard and easy questions

Your work from Wednesday will help you very much here. Is it easier or harder when you have to regroup and exchange? Why?

The video below explains exchange nicely so have a look at it before you begin.

<https://www.youtube.com/watch?v=8bxXLptBuuE>

2. Which questions are easy / hard?

$$213323 - 70 =$$

$$512893 + 300 =$$

$$819354 - 500 =$$

$$319954 + 100 =$$

Explain why you think the hard questions are hard.

The image contains two side-by-side diagrams on a grid background. The left diagram is titled 'Column Addition (no exchange)' in blue. It shows the addition of 351 and 634. The columns are labeled H (Hundreds), T (Tens), and O (Ones). The numbers are written in green. A blue arrow points up from the ones column to the tens column, and another blue arrow points up from the tens column to the hundreds column. The result, 985, is written below a horizontal line. Labels include 'Check you answer' on the left, 'Start here' on the right, 'Add the hundreds' on the left, and 'Add the ones' on the right. The right diagram is titled 'Column Subtraction (no exchange)' in orange. It shows the subtraction of 341 from 763. The columns are labeled H, T, and O. The numbers are written in blue. An orange arrow points up from the ones column to the tens column, and another orange arrow points up from the tens column to the hundreds column. The result, 422, is written below a horizontal line. Labels include 'Check you answer' on the left, 'Start here' on the right, 'Subtract the hundreds' on the left, and 'Subtract the ones' on the right.

# Making an estimate

Let's recap. To estimate means to make a really good guess. **Rounding** could definitely help you here. Remember the rule?



3. Which of these number sentences have the answer that is between 0.5 and 0.6

$$11.74 - 11.18$$

$$33.3 - 32.71$$

# Always, sometimes, never

You need to do your research here. I am sure the answer will come quickly to you. The challenge is that you need to prove your point. Good luck!

4. Is it always, sometimes or never true that the sum of four even numbers is divisible by 4.

