

Homework sheet: stage 6 - 7

Revision of add-sub and mult-div domains

AC
EA
AA
AM
AP

Exercise 1: word problems

These questions all need some thinking and working out. Show how you work out the answer to each problem, explaining what you are calculating at each step.

- 1) A factory produces chairs and tables. A table costs \$656 to make and a chair costs \$124 to make. How much does it cost the factory to make a table and 4 chairs?
- 2) The factory sells the table at \$896 and a chair at \$175. By how much are a table and 4 chairs marked up?
- 3) The factory can make 5 tables and 30 chairs a day. How much "profit" is the factory making if it sells all of its tables and chairs each day?
- 4) On a piece of paper with your name on it make up another set of word problems. Use numbers that will allow someone to calculate the answers mentally. Write a model answer for your problem on the back of the page. Hand the problem in at the end of the week.

Exercise 2: rounding and compensating

Jamie's method for solving $197 + 379$ is to add 200 to 379 then take 3 off. Some of the following problems can be done using this method. Where sensible use the method to answer the problem and show your working in your book. If the method does not make the problem easy to do explain why not, and show what you would do instead

- 1) $196 + 455$ (2) $368 + 299$ (3) $490 + 447$
- 4) $679 - 398$ (5) $375 - 196$ (6) $459 - 135$
- 7) $288 + 166$ (8) $599 - 341$ (9) 3×19
- 10) 5×119 (11) 8×98 *(12) $480 \div 9$
- 13) Write five decimal problems and use them to show how Jamie's strategy could help you answer decimal problems

Exercise 3: multiplication without the sign

In doing multiplications we can leave out the multiplication sign if we are using brackets. For example $(4.1)(2)$ means 4.1×2

- 1) Write these multiplications without the multiplication sign.
 - (a) 7×45 (b) 6×29 (c) 5×119

Another way of writing 6×23 is to write $6(20 + 3)$, while 8×89 can be written as $8(90 - 1)$.

Notice: when doing this we leave out the multiplication sign.

- 2) Write these multiplications in this format.
 - (a) 3×21 (b) 4×32 (c) 6×79
- 3) $6(20 + 3)$ is another way of writing 6×23 , which can be worked out by doing 6×20 and 6×3 , and adding the answers. Write these problems in the bracket format and find the answers to the following multiplications
 - (a) 5×43 (b) 6×33 (c) 6×69

Exercise 1

- ## Exercise 2

- ### Exercise 3

- You may have also done $6(60 + 9)$ – but that would be clumsy, wouldn't it!