To use all operations + - x and ÷

Steps to success: I can find all numbers 21 to 30
1) by using the digits 1, 2, 3, 4, 5
2) by using operations + - x and ÷
3) by using these digits only once.
4) by using brackets to show which bits to do first

Possible answers on last flipchart page!
Don't look, unless you're stuck.

Come back to a number if it too difficult.

# Mental:

Your teacher will call out an answer from the 6, 7, 8 or 9 times table.

If the number is in the

6s, put your hands on your head.

7s, put your hands on your laps.

8s, put your hands on your hips.

9s, put your hands in the air.

It is possible to make the number 6 by using only the digits 1, 2, 3 and 4, plus any operation + - x and ÷.

Brackets () means we do this bit first.

Look:

To make $6 = (4 + 3) - (2 - 1)$

$6 = 7 - 1$

Can you think of another way to do this using the same rules?

NB: You do not have to use all digits or operations. You can only use a digit once.

See next page for one possible answer…

To make $6 = (21 + 3) \div 4$

$6 = 24 \div 4$

# Next page has the answers to the work! Don't look till end of lesson.

Can you use digits 1, 2, 3, 4 or 5 to make the numbers 21 to 30?

eg: $21 = (5 \times 4) + 1$

Remember: You can only use a digit once.

You don't have to use them all.

(Use brackets to show what you do first)

$21 = (5 \times 4) + 1$;  $22 = (5 \times 4) + 2$;  $23 = (5 \times 4) + 3$;  $24 = (5 \times 4) + 3$

$25 = 5 \times (4 + 1)$;  $26 = 5 \times (4 + 1) + (3 - 2)$;  $27 = 3 \times (5 + 2)$;

$28 = (4 + 3) \times (5 - 1)$;  $29 = (5 \times (3 \times 2)) - 1$;  $30 = 5 \times 3 \times 2$.