



Oscar – Numeracy and Maths Guru

Tidy Numbers

This is a top tip for when you are adding several numbers together. Say, I am having a party and my friends have agreed to bring a few mangoes each (I am planning to invite everyone over when Miss Gray goes on holiday in a couple of weeks). I will need to add all of the mangoes together to see if I have enough to make 'Aunty Joy's Manificent Mango Mousse' recipe – this is an example of where I would be looking for tidy numbers!

What are tidy numbers?

Tidy numbers are numbers which add together to make a multiple of 10, 100 or 1000.

We all know which numbers go together to make 10:

9+1, 1+9, 8+2, 2+8, 7+3, 3+7, 6+4, 4+6, 5+5

We can build on this knowledge to identify which multiples of 10 go together to make 100:

90+10, 10+90, 80+20, 20+80, 70+30, 30+70, 60+40, 40+60, 50+50

If we go up by another factor of 10 we can see which multiples of 100 add to make 1000:

900+100, 100+900, 800+200, 200+800, 700+300, 300+700, 600+400, 400+600, 500+500

When you are adding several numbers together look at them very closely to see if you can match any up to make a tidy number – this will make your mental addition much quicker.

Look at this example:

$$6 + 9 + 5 + 4 + 1 + 7 + 5$$

Look for the tidy numbers:

$$6 + 9 + 5 + 4 + 1 + 7 + 5$$

If I add the tidy the tidy numbers first I get $10 + 10 + 10 = 30$ and then I just have to add the 7.

$$6 + 9 + 5 + 4 + 1 + 7 + 5 = 37$$

Here is a much trickier example using bigger numbers:

$$36 + 19 + 25 + 44 + 31 + 17 + 15$$

Look for the tidy numbers:

$$36 + 19 + 25 + 44 + 31 + 17 + 15$$

GROUPING NUMBERS
eg. When adding several numbers

$$\begin{aligned}
 & 8 + 6 + 3 + 12 + 4 \\
 & \underbrace{8 + 12}_{20} + \underbrace{6 + 4}_{10} + 3 \\
 & = 33
 \end{aligned}$$

$$\begin{aligned}
 & 80 + 60 + 30 + 120 + 40 \\
 & \underbrace{80 + 120}_{200} + \underbrace{60 + 40}_{100} + 30 \\
 & = 330
 \end{aligned}$$

If I add the tidy the tidy numbers first I get $80 + 50 + 40 = 170$ and then I just have to add the 17.

$$36 + 19 + 25 + 44 + 31 + 17 + 15 = 187$$