

New Style Of Numeracy Starter

This is the new style of numeracy starter I will be using for the foreseeable future, this may be tweaked for the first few weeks. The whole point of this new style is to train the students how to revise Maths and to try and make them more independent outside of the classroom. If you have any questions please don't hesitate to ask.

This week I would like to recap the previous three weeks by using skills they have learnt when looking at area and fractions.

How Do I Revise Maths?

Harriet gets paid £8.27 an hour, she works for 23 hours a week. Before tax or national insurance how much is Harriet being paid per week?

Alex shops around and sees two offers on tickets she wants.

Option 1: 4 tickets for £23.72 each at a discounted rate.

Option 2: Each ticket costs £32, buy 3 and get 1 free.

Alex needs 4 tickets, which offer should she use?

Employee No.	Employee Name	Process Date	National Insurance Number				
1	Mr A Bibby	30/09/2007	NY212121C				
Payments		Units	Rate	Amount	Deductions		Amount
Salary		1.00	5000.0000	5000.00	PAYE Tax	1284.31	
					National Insurance	292.55	
Mr. A Bibby Bilal House 260 Picton Road Liverpool L15 4LP		This Period		Total Gross Pay TD 5000.00 Gross for Tax 5000.00 Earnings for NI 2904.00	Year To Date		Total Gross Pay TD 30000.00 Gross for Tax TD 30000.00 Tax paid TD 7706.20 Earnings For NI TD 17424.00 National Insurance TD 1755.30
Payslips Plus Ltd Tax Code: 522L Dept: Tax Period: 6 Payment Method: 0		Payment Period		Monthly	Net Pay		3000.00

Not sure how to multiply decimals,
google 'how to multiply decimals'
see what methods you can find.
Are there any good videos?



Answers

Harriet gets paid £8.27 an hour, she works for 23 hours a week. Before tax or national insurance how much is Harriet being paid?

Option 1

£8.27 x 23

Multiply £8.27 by 100 to make £827 a whole number. This will give you £827.

Place the numbers in a grid to multiply:

	800	20	7
20	16000	400	140
3	2400	60	21

Add up the products:

$$16000+400+140+2400+60+21= \text{£}19021$$

As you previously multiplied £8.27 by 100 to make the calculation easier now you must rectify that by dividing the answer by 100 to get £190.21.

Alex shops around and sees two offers on tickets she wants.

Option 1: 4 tickets for £23.72 each at a discounted rate.

Option 2: Each ticket costs £32, buy 3 and get 1 free.

Alex needs 4 tickets, which offer should she use?

The first deal 4 tickets for £23.72 costs £94.88, the second deal costs £96, the first deal is cheaper.

Option 2

Put £8.27 x 23 straight into a grid:

	8	0.2	0.07
20	160	4	1.4
3	24	0.6	0.21

Add up the products:

$$160+4+24+0.6+1.4+0.21=\text{£}190.21$$

Think This Is Something You Will Forget?

You should make a revision aid every time you revise, this way you have something you can keep referring back to. If you revise something one day then look over it for 10 minutes the next day and 5 minutes the day after that you WILL retain more of the information. Why put hours of work in then waste those hours by never re-visiting areas?

A good revision tool for this technique would be a fully worked example you have annotated so when you read it back it still makes sense.

Need Extra Practice?

If you are needing extra practice on multiplying decimals you could make your own questions up as you can check them in a calculator!

<https://www.ixl.com/math/grade-5/multiply-decimals-and-whole-numbers-word-problems>

The link above contains some practice at the more worded questions.