GCSE Maths

ASSIGNMENT Wk2

Preparatory Sheet

Required preparation for the session on......

FRACTIONS, DECIMALS, PERCENT and RATIO

Aims of this session: Review your abilities in each of these areas, Green (feel confident...G), Amber (need to work more on...A), Red (Feel weaker at this...R)

G   A   R

1. Find fractions of values (incl. 'time') converting to decimal or %
2. Add, Subtract, Multiply and Divide Fractional values, incl. mixed numbers
3. Solve problems involving fractions and mixed numbers
4. Calculate using decimals
5. Use % Formulae to find a percent of a value or reverse a % change
6. Write a Ratio using at least two values, relating to real life
7. Simplify Ratio
8. Calculate ratio proportions in solving problems
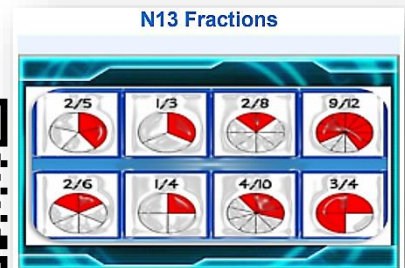
MOSTLY GREEN   MOSTLY AMBER   MOSTLY RED

START

Log into 'Moodle'. Watch the video/s, read and practice

using the online materials. Read your GCSE maths AQA book

N13 Fractions

| 2/5 | 1/3 | 2/8 | 9/12 |
| 2/6 | 1/4 | 4/10 | 3/4 |

Write a comment about what you learned from the videos / materials below

1. https://padlet.com/mathsman230774/64lonfz151hu

N13 Fractions

malcolm cooke
7 months ago

Fractions of values (incl 'time') converting to decimal or %

Q….Try putting these amounts of time in size order starting with the most amount of time

0.45 hr   45mins   4/5 hr

HINT… change some of the values so they are all in the same format before comparing them.

2.

Add, Subtract, Multiply and Divide Fractional Values (incl. mixed fractions)

Q... Work out how many full 1/4 Litre drinks of cola can be made from a single 3 ½ Litre bottle.

Hint...Find how many 1/4 L fit in a single litre, then work out how many for the three whole litres etc. What about changing halves into 'quarters'...!

3.

Solve problems involving fractions

Q... I budget for 2/5 of my monthly wage to go on rent, ¼ of the monthly wage on other bills. What fraction of my original monthly wage do I have left?

Hint...start with the number 1. Then subtract 2/5. Then subtract ¼. Find what is left as a fraction.

4. https://padlet.com/mathsman230774/9aff8gb3w3x3

Calculate using decimals

Q... Put these lengths of fabric in order of size, then add them all to find the total length.

2.7m   8.4m   6.26m   2.74m

Hint... always have the same number of decimal places on each value when comparing so go ahead and put zeros on the end of any numbers you need to before sorting. When adding them always make sure the decimal point is lined up for each value.

5. https://padlet.com/mathsman230774/vlhg23fhhfhx

N15 Percentages

Use % Formulae to find a percent of a value or reverse a % change

Q… In January a dog weighed 42lbs but then gained 10% of its weight by February. Its owner puts the dog on a diet and it loses 5% of its February weight. How much does the dog weigh now?

Hint… this is a percentage increase question followed immediately by a percentage decrease. First find 10% of 42lbs and add this on. Then take this new value and find 5%, remove this amount to find the answer.

N16 Ratios

6. https://padlet.com/mathsman230774/8hh9oujsbtlx

Write a Ratio using at least two values, relating to real life

Write down flour to eggs as a ratio from the sponge cake recipe

Hint… just write down the two values in the correct order left to right with a

colon in between them.

Basic Sponge Cake Recipe

Ingredients:

I used 4 eggs for a 25cm baking pan

My 4 eggs weighed exactly 224gr

So I weighed out

224gr of Granulated sugar and

224gr All Purpose Flour

7.

Simplify Ratio

A restaurant menu is A4 size with length around 30cm and width 20cm. Write these values as a ratio and simplify.

Hint… Write down the two values left to right with a colon in between then

divide both numbers by a same number to make each smaller.

8.

Calculate ratio proportions in solving problems

A hotel employs 20 cleaners and 4 reception staff for 100 visitors.

Work out how many cleaners and reception staff are required for 150 visitors.

Hint… you need to see the difference between the number of visitors as a % increase and then apply this to the number of cleaners and reception staff.

END OF PREPATORY ASSIGNMENT

What to do now….

1. **Ensure you have marked in each box if you feel confident in each topic or not (this will inform you and your tutor which activities you should do in the session)**
2. **Keep this yellow assignment for reference and revision purposes**
3. **Upload this completed sheet, any of todays completed work and anything else you have been working on to TEAMS under your own folder**