Miss Robinson's Maths Group Homework

Autumn Week 2

Remember to set your work out clearly and write in pencil.

Please try all questions.

Please DO NOT print any of this homework. Write answers directly into your Homework Book and include any working out.

Arithmetic Warm Up

In your Homework Book list:

- The cube numbers from 1^3 to 15^3

  (Remember that a square number is a number multiplied by itself.
  Example: $4^3 = 4 \times 4 \times 4 = 64$ $7^3 = 7 \times 7 \times 7 = 343$)

Please learn cubed numbers thoroughly as we will be having a quick test on them next week!

LI: to be able to divide longer numbers using standard methods

Example: $3\,564 \div 12 =$

$$
\begin{array}{r}
0297 \\
12\overline{)\,3^{3}5^{11}6^{8}4}
\end{array}
$$

$$
\begin{array}{r}
0297 \\
12\overline{)\,3564} \\
-\ \underline{24} \quad (2 \times 12) \\
116 \\
-\ \underline{108} \quad (9 \times 12) \\
84 \\
-\ \underline{84} \quad (7 \times 12) \\
0
\end{array}
$$

Remember this?

LI: to be able to divide longer numbers using standard methods

Use the method on the previous page to calculate the following – leaving any remainders as whole numbers

5 264 ÷ 16 =

15 0167 ÷ 19 =

12 067 ÷ 18 =

LI: to be able to add and subtract fractions using equivalence

Use the method we have used
In class with the annotations.

Add or **Subtract** the following Fractions

1. $\frac{2}{3} + \frac{1}{2} = \square$
2. $\frac{2}{5} + \frac{1}{10} = \square$
3. $\frac{1}{5} + \frac{2}{4} = \square$
4. $\frac{3}{5} + \frac{3}{8} = \square$
5. $\frac{2}{7} + \frac{1}{4} = \square$
6. $\frac{3}{5} - \frac{3}{10} = \square$
7. $\frac{4}{6} - \frac{1}{12} = \square$
8. $\frac{4}{6} - \frac{1}{2} = \square$
9. $\frac{3}{4} - \frac{1}{3} = \square$
10. $\frac{7}{8} - \frac{3}{4} = \square$

Next week we will look at:

- Adding and subtracting mixed numbers. *How do you think we will do that?*
- Multiplying fractions

Reflect on what you know about fractions and mixed numbers.

Adding and subtracting mixed numbers

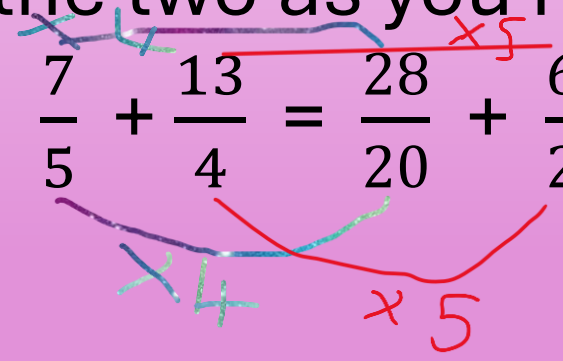
$$1\frac{2}{5} + 3\frac{1}{4} =$$

Step 1: convert both to improper fractions

$$1\frac{2}{5} = \frac{7}{5} \qquad 3\frac{1}{4} = \frac{13}{4}$$

Step 2: add the two as you have previously

$$\frac{7}{5} + \frac{13}{4} = \frac{28}{20} + \frac{65}{20} = \frac{93}{20} = 4\frac{13}{20}$$



Lowest common multiple is 20.

Try these using the method on the previous page

a) $1\frac{1}{3} + 2\frac{1}{4} =$

b) $3\frac{2}{5} + 5\frac{3}{10} =$

c) $4\frac{1}{2} + 1\frac{2}{3} =$

Remember to bring any questions about the work into Monday's lesson.

Have a wonderful weekend!