Good morning grade 7's

I do hope you are all well and managing to keep up to date with the work. I know these are strange times and this way of teaching is not ideal . However, we must make the best of this unusual situation.

Before we move on to this weeks work. I am going to show you how to simplify a fraction before multiplying them.

We can use the criss cross method to simplify.

$$\frac{5}{6} \times \frac{9}{10} = \frac{45}{60}$$

To multiply fractions, simply times the numerators and the denominators together. Then you should simplify your result if possible.

$$\frac{\overset{1}{\cancel{5}}}{\underset{2}{\cancel{6}}} \times \frac{\overset{3}{\cancel{9}}}{\underset{2}{\cancel{10}}} = \frac{3}{4}$$

To avoid having to do simplifying at the end, you can cancel common factors. Which basically allow you to simplify the fractions before multiplying them. This is a lot easier and less time consuming.

$$\frac{7}{\underset{2}{\cancel{6}}} \times \frac{\overset{1}{\cancel{3}}}{9} = \frac{7}{18}$$

Simplify diagnolly if possible then multiply.

$$\frac{\overset{1}{\cancel{3}}}{\underset{3}{\cancel{15}}} \times \frac{\overset{1}{\cancel{5}}}{\underset{2}{\cancel{6}}} = \frac{1}{6}$$
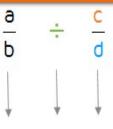
DIVIDING FRACTIONS

When dividing fractions, we use the TURN and TIP method

DIVIDING FRACTIONS

1. <u>Keep</u> the first fraction the same.
2. <u>Turn</u> the division sign to a multiplication sign.
3. <u>Tip</u> the second fraction over.
4. Numerator x Numerator

   Denominator x denominator

   Simplify

Keep, Turn, Tip

$$\frac{a}{b} \div \frac{c}{d}$$

$$\frac{a}{b} \quad X \quad \frac{d}{c}$$

<u>ACTIVITY 1</u> - 04.05.2020

COMPLETE THE FOLLOWING ACTIVITY IN YOUR BOOK. SHOW ALL CALCULATIONS.

THE FIRST ONE HAS BEEN DONE AS AN EXAMPLE

1) $\frac{2}{5} \div \frac{3}{4} =$ 6) $\frac{3}{4} \div \frac{4}{5} =$

2) $\frac{2}{4} \div \frac{1}{2} =$ 7) $\frac{1}{2} \div \frac{6}{10} =$

3) $\frac{4}{5} \div \frac{2}{3} =$ 8) $\frac{1}{2} \div \frac{2}{3} =$

4) $\frac{2}{5} \div \frac{2}{3} =$ 9) $\frac{2}{4} \div \frac{3}{10} =$

5) $\frac{2}{4} \div \frac{1}{5} =$ 10) $\frac{2}{3} \div \frac{1}{5} =$

1) $\frac{2}{5} \div \frac{3}{4}$

$= \frac{2}{5} \text{ X } \frac{4}{3}$

$= \frac{8}{15}$

DIVIDING MIXED NUMBERS

$$1\frac{1}{2} \div 3\frac{1}{8}$$

$$= \frac{3}{2} \div \frac{25}{8} \quad \text{Change to improper fractions}$$

$$= \frac{3}{2} \times \frac{8}{25} \quad \text{Change} \div \text{to} \times, \text{flip divisor}$$

Multiply

$$= \frac{12}{25}$$

$$7 \div 3\frac{3}{5}$$

$$= \frac{7}{1} \div \frac{18}{5} \quad \text{Change to improper fractions}$$

$$= \frac{7}{1} \times \frac{5}{18} \quad \text{Change} \div \text{to} \times, \text{flip divisor}$$

Multiply

$$= \frac{35}{18}$$

$$= 1\frac{17}{18} \quad \text{Change to Mixed Number}$$

<u>ACTIVITY 2</u>   - 05.05.2020

COMPLETE THE FOLLOWING ACTIVITY IN YOUR BOOK. SHOW ALL CALCULATIONS.

THE FIRST ONE HAS BEEN DONE AS AN EXAMPLE

1. $3\frac{2}{7} \div 1\frac{1}{4}$

6. $1\frac{1}{3} \times 1\frac{2}{3}$

2. $1\frac{2}{3} \div 3\frac{1}{3}$

7. $1\frac{1}{3} \times 2\frac{1}{5}$

1) $3\frac{2}{7} \div 1\frac{1}{4}$

$= \frac{23}{7} \div \frac{5}{4}$

$= \frac{23}{7} \times \frac{4}{5}$

$= \frac{115}{35}$ (CAN BE LEFT AS AN IMPROPER

3. $2\frac{1}{4} \div 1\frac{1}{2}$

8. $2\frac{1}{7} \div 2\frac{1}{2}$

4. $6\frac{1}{2} \div 2\frac{2}{3}$

9. $1\frac{3}{11} \div 2\frac{1}{3}$

5. $2\frac{1}{10} \div 2\frac{3}{5}$

10. $3\frac{1}{2} \div 2\frac{3}{4}$

COMPLETE THE FOLLOWING ACTIVITY IN YOUR BOOK. SHOW ALL CALCULATIONS.

NUMBER 5 HAS BEEN DONE FOR YOU AS AN EXAMPLE (REMEMBER TO CALCULATE BRACKETS FIRST)

1. $3\frac{1}{2} \times 1\frac{4}{7} \times 1\frac{1}{3}$

6. $4\frac{1}{2} \times 3\frac{3}{4} \times 2\frac{2}{3}$

2. $3\frac{1}{2} \times 1\frac{1}{7} \div 1\frac{1}{4}$

7. $2\frac{5}{7} \div \left(1\frac{8}{11} \times 1\frac{2}{3}\right)$

3. $1\frac{1}{3} \times 1\frac{5}{7} \div 1\frac{3}{4}$

8. $2\frac{1}{4} \times 1\frac{2}{3} \div 1\frac{1}{2}$

4. $1\frac{1}{4} \times 10\frac{1}{2} \div 1\frac{1}{2}$

5. $1\frac{3}{4} \div \left(3\frac{2}{3} \div 3\frac{1}{3}\right)$

5)

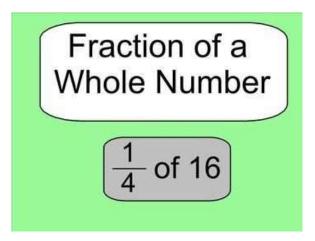$$1\frac{3}{4} \div 3\frac{2}{3} \div 3\frac{1}{3}$$

$$= \frac{7}{4} \div \left(\frac{11}{3} \div \frac{10}{3}\right)$$

$$= \frac{7}{4} \div \left(\frac{11}{\cancel{3}} \times \frac{\cancel{3}}{10}\right)$$

$$= \frac{7}{4} \div \frac{11}{10}$$

$$= \frac{7}{4} \times \frac{11}{10}$$

$$= \frac{77}{40}$$

Fraction of a Whole Number

$$\frac{1}{4} \text{ of } 16$$

There are 2 ways to calculate fraction of whole numbers.

Method 1

$$\frac{3}{4} \text{ of } 28$$

$$= \frac{3}{4^1} \text{ X } \frac{28^7}{1}$$

$$= \frac{21}{1}$$

$$= 21$$

Method 2

$$\frac{3}{4} \text{ of } 28$$

Whole Number ÷ by the denominator = ☐

☐ x the numerator

28 ÷ 4 = 7

7 x 3 = 21

ACTIVITY 4 - 07.05.2020

COMPLETE THE FOLLOWING ACTIVITY IN YOUR BOOK. SHOW ALL CALCULATIONS.

1. $\frac{3}{4}$ of 16   2. $\frac{4}{5}$ of 250   3. $\frac{4}{7}$ of 2100   4. $\frac{2}{6}$ of 120

5. $\frac{2}{3}$ of 240

6. Sue spends $\frac{3}{8}$ of R320. How much does she have over?

7. Qwama and his sister is given R600. Qwama must get $\frac{3}{5}$ of the money and his sister must get $\frac{2}{5}$. Calculate the amount that Qwama and his sister will receive.