

03.02.20201 – EXTREME Equivalent Fractions Y4 Challenge Sheet

Use this sheet **WHEN** you have completed the main worksheet and challenge sheet. Remember, this work is designed to be harder than the main work for the day.

Some may not appear too difficult, but you will need to explain your reasoning clearly.

1. Order these fractions from smallest to largest:

$$\frac{3}{4} \quad \frac{3}{5} \quad \frac{9}{10} \quad \frac{17}{20}$$

Handwritten solution for problem 1:

$$\begin{array}{cccc} \frac{3}{4} & \frac{3}{5} & \frac{9}{10} & \frac{17}{20} \\ \downarrow \times 5 & \downarrow \times 4 & \downarrow \times 2 & \downarrow \times 1 \\ \frac{15}{20} & \frac{12}{20} & \frac{18}{20} & \frac{17}{20} \end{array}$$

Smallest to largest

$$\frac{3}{5} \quad \frac{3}{4} \quad \frac{17}{20} \quad \frac{9}{10}$$

2. Daisy makes a ham and pineapple pizza and a peperoni pizza. Both pizzas are exactly the same size. She cuts the ham and pineapple pizza into 16 slices. She cuts the peperoni pizza into 8 slices. Her family eats 9 slices of the ham and pineapple and 5 slices of the peperoni pizza. Did her family eat more pineapple or peperoni pizza? How do you know?

Handwritten solution for problem 2:

$$\begin{array}{l} 2) \quad \frac{9}{16} \text{ Ham + Pineapple} \\ \quad \quad \frac{5}{8} \text{ Peperoni} \end{array}$$

Convert to same denominator.

$$\frac{9}{16} = \frac{9}{16} \quad \frac{5}{8} = \frac{10}{16}$$

More peperoni was eaten!
Lucky them! :)

3. Mr Prichard wins the lottery. Because he is so incredibly kind, he gives $\frac{4}{12}$ of his money to Mr Garner, $\frac{1}{12}$ to Mr Brown and $\frac{3}{8}$ to Mrs Armitage. Because of his generous ways, Mr Pritchard has no idea how much he has left. Can you work out how much he has left?

Handwritten solution for problem 3:

3) Total?

$\frac{4}{12}$	$\frac{1}{12}$	$\frac{3}{8}$?
Mr G	Mr B	Mrs A	

Same denominator?

$$\begin{array}{ccc} \frac{4}{12} & \frac{1}{12} & \frac{3}{8} \\ \downarrow \times 2 & \downarrow \times 2 & \downarrow \times 3 \\ \frac{8}{24} & \frac{2}{24} & \frac{9}{24} \end{array}$$

Total given away

$$\frac{19}{24}$$

Mr P has $\frac{5}{24}$ left over!

