Use this sheet WHEN you've completed the main worksheet and want a challenge. Remember to use your blue book if you have it to show your workings. The questions were resourced from White Rose Maths and Twinkl Diving into Mastery.
1.

Jack and Annie are solving $\frac{4}{5}-\frac{2}{5}$
Jack's method:


Annie's method:


They both say the answer is two fifths. Can you explain how they have found their answers?
2. Find the missing fractions:

$$
\begin{aligned}
& \frac{7}{7}-\frac{3}{7}=\frac{2}{7}+\frac{\square}{7} \\
& \frac{\square}{9}-\frac{5}{9}=\frac{4}{9}-\frac{2}{9}
\end{aligned}
$$

3. 

Work out what the missing numerators could be are. How many possibilities can you find?
a)

b)

4. How many fraction addition and subtractions can you make from this model?


Jack has just taken away $\frac{2}{5}$ from his bar model.
Annie has found the difference between $\frac{4}{5}$ and $\frac{2}{5}$ which has shown her that the answer is $\frac{2}{5}$
a. $\frac{2}{7}$ because the difference between $\frac{7}{7}$ and $\frac{3}{7}$ is $\frac{4}{7}$
b. $\frac{7}{9}$ because $\frac{4}{9}$ subtract $\frac{2}{9}$ equals $\frac{2}{9}$

1) a) These are some of the possible answers: b)
$\frac{7}{12}-\frac{1}{12}=\frac{1}{12}+\frac{5}{12}$
$\frac{7}{12}-\frac{2}{12}=\frac{1}{12}+\frac{4}{12}$
$\frac{15}{16}-\frac{8}{16}-\frac{1}{16}=\frac{6}{16}$
$\frac{16}{16}-\frac{8}{16}-\frac{2}{16}=\frac{6}{16}$
$\frac{7}{12}-\frac{3}{12}=\frac{1}{12}+\frac{3}{12}$
$\frac{7}{12}-\frac{4}{12}=\frac{1}{12}+\frac{2}{12}$
$\frac{7}{12}-\frac{5}{12}=\frac{1}{12}+\frac{1}{12}$

> There are lots of calculations children could record. Children may even record calculations where there are more than 2 fractions e.g. $\frac{3}{9}+\frac{1}{9}+\frac{3}{9}=\frac{7}{9}$

