<u>Use this sheet **WHEN** you've completed the main worksheet and want a challenge</u>. <u>Remember to use your blue book</u> <u>if you have it to show your workings.</u> <u>The questions were resourced from White Rose Maths and Twinkl Diving into</u> 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? 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  $\frac{2}{5}$ 

2. Find the missing fractions:

$$\frac{7}{7} - \frac{3}{7} = \frac{2}{7} + \frac{\square}{7}$$

$$\frac{\Box}{Q} - \frac{5}{Q} = \frac{4}{Q} - \frac{2}{Q}$$

- 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  $\frac{2}{9}$

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



- b) 8 = 6 + 6 16 + 16

1) a) These are some of the possible answers: b

$$\frac{7}{12} - \frac{1}{12} = \frac{1}{12} + \frac{5}{12}$$

$$\frac{7}{12} - \frac{2}{12} = \frac{1}{12} + \frac{4}{12}$$

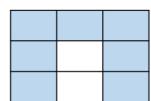
$$\frac{7}{12} - \frac{3}{12} = \frac{1}{12} + \frac{3}{12}$$

$$\frac{7}{12} - \frac{4}{12} = \frac{1}{12} + \frac{2}{12}$$

$$\frac{7}{12} - \frac{5}{12} = \frac{1}{12} + \frac{1}{12}$$

 $\frac{15}{16} - \frac{8}{16} - \frac{1}{16} = \frac{6}{16}$  $\frac{16}{16} - \frac{8}{16} - \frac{2}{16} = \frac{6}{16}$ 

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



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