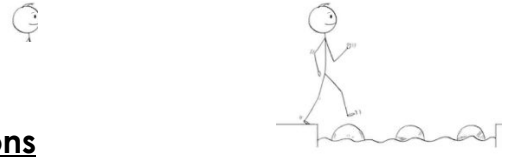
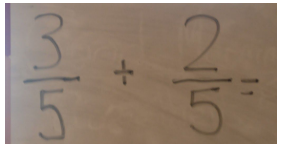
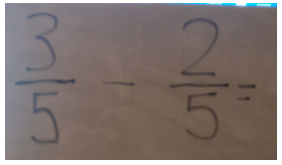


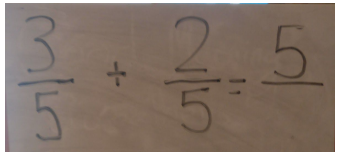
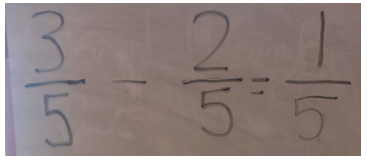
**Year 4 Maths 22.05.20**
**Steppingstone activity**
**LO: To add and subtract fractions**
**Success Criteria:**

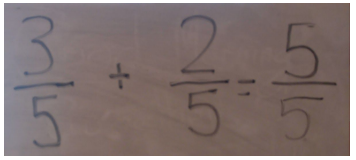
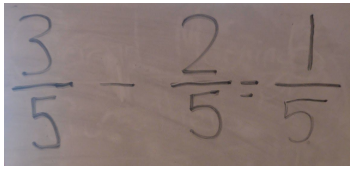
| |
|---|
| 1. Look at your fractions |
| 2. Add or subtract the numerators |
| 3. Write your answer |

**BBC Bitesize fractions:** https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/z9n4k7h

**Model**

1. 


2. 


3. 


**Now you try… In each problem, identify the fraction, then circle the fractions that are equivalent**

1) 3/5 + 2/5 = 5/5
2) 7/10 + 1/10 = 8/10
3) 4/5 – 2/5 = 2/5
4) 7/9 – 3/9 = 4/9
5) 5/6 + 2/6 = 7/6
6) 6/7 – 2/7 = 4/7
7) 8/11 + 5/11 = 13/11
8) 5/9 + 2/9 = 7/9

1a. Use the digit cards to complete the calculations so that they equal $\frac{10}{12}$.

A. $\frac{3}{12} + \frac{5}{12} + \frac{\square}{12}$ — 3

B. $\frac{\square}{12} + \frac{6}{\square} + \frac{1}{12}$ — 2, 12

**1a.** A. $\frac{3}{12} + \frac{5}{12} + \frac{\boxed{2}}{12}$

B. $\frac{\boxed{3}}{12} + \frac{6}{\boxed{12}} + \frac{1}{12}$

3b. Sinead and Johnny are finding missing numbers in a calculation.

$\frac{7}{20} + \frac{5}{20} + \frac{\square}{\square} = \frac{19}{20}$

Sinead: The missing fraction is $\frac{7}{20}$.

Johnny: The missing fraction is $\frac{7}{40}$.

Who is correct? Explain how you know.

**3b. Sinead is correct because she has added only the numerators.**

Canonbury Home Learning

**Year 4 Maths**

**Lesson 22.05.20**

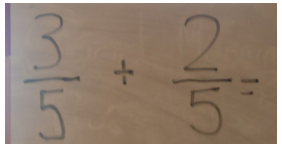
**LO: To add and subtract fractions**

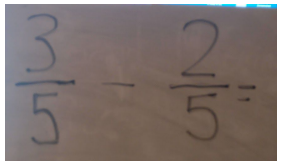
**Success Criteria:**

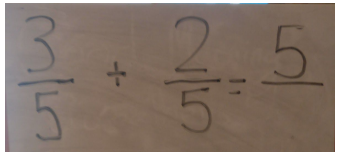
| |
|---|
| 1. Look at your fractions |
| 2. Add or subtract the numerators |
| 3. Write your answer |

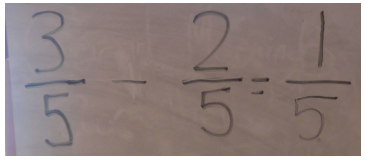
**BBC Bitesize fractions: https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/z9n4k7h**

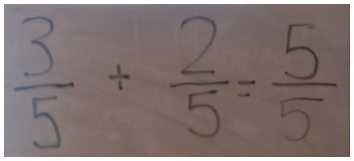
**Model:**

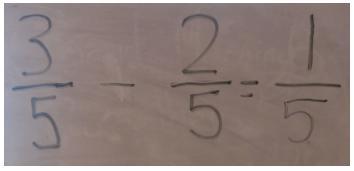
1. 

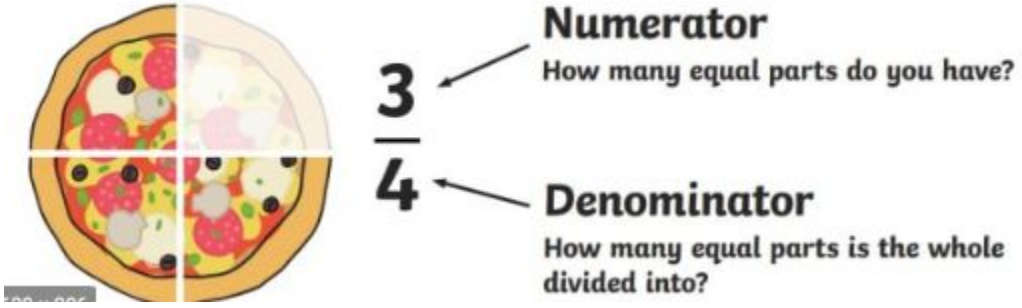




2. 


3. 

Canonbury Home Learning

**Year 4 Maths Main activity**

Complete at least 2 columns, more if you can!

## Task 1 (Adding Fractions)

**Practice: Write the equivalent fraction**

1. 6/10 + 3/10 = 9/10
2. 4/5 + 3/5 = 7/5
3. 8/11 + 5/11 = 13/11
4. 5/9 + 2/9 = 7/9
5. 8/11 + 5/11 = 13/11
6. 8/6 + 3/6 = 11/6
7. 8/11 + 5/11 = 13/11
8. 9/6 + 3/6 = 12/6

**Fill in the missing fractions**

9. 3/7 + 4/7 = 1
10. 5/8 + 2/8 = 7/8

**Read and answer the following problems**

11. Joanne eats 3/8 of a bunch of grapes; David eats 2/8 of a bunch of grapes. What fraction of the grapes have they eaten altogether? 5/8
12. David has 4/7 of a cream cake. Sarah has 1/7 of the same cream cake. What fraction of the cake have they eaten altogether? 5/7

**Challenge:**

13. 3/10 + 2/5 = 7/10
14. 3/6 + 4/12 = 10/12
15. 3/4 + 7/8 = 13/8

## Task 2 (Subtracting Fractions)

**Practice: Use the bar model to find the fraction of a quantity**

1. 7/8 - 3/8 = 4/8
2. 16/8 - 9/8 = 7/8
3. 6/7 - 2/7 = 4/7
4. 17/11 - 9/11 = 8/11
5. 16/16 - 9/16 = 7/16
6. 11/7 - 4/7 = 7/7
7. 12/9 - 3/9 = 9/9
8. 13/9 - 6/9 = 7/9

**Fill in the missing fractions**

9. 13/8 - 6/8 = 7/8
10. 13/5 - 7/5 = 6/5

11. 2 - 7/12 = 1 5/12

12. 3 - 9/12 = 2 3/12

$2 - \frac{\square}{12} = 1\frac{5}{12}$ $3 - \frac{9}{12} = \frac{\square\square}{12}$

13. 3 - 5/16 = 2 11/16

14. 4 - 4/9 = 3 5/9

$3 - \frac{\square}{16} = 2\frac{11}{16}$ $4 - \frac{4}{9} = \frac{\square\square}{9}$

## Task 3

**Reasoning**

**Explain your answers.**

**1) Which is the incorrect calculation?**

**5/12 + 3/12 = 8/12**

**5/12 + 3/12 = 8/24**

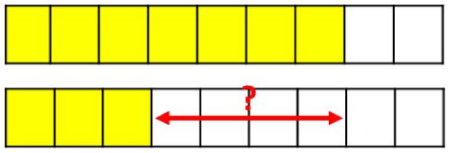
**5/12 + 3/12 = 4/6**
**(This is equivalent)**

**Explain your reasoning.**

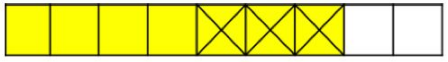
Annie and Amir are working out the answer to this problem.

$\frac{7}{9} - \frac{3}{9}$

Annie uses this model.




Amir uses this model.



Which model is correct? Explain why.

Can you write a number story for each model?

They are both correct. The first model shows finding the difference and the second model shows take away.

Ensure the number stories match the model of subtraction. For Annie's this will be finding the difference. For Amir this will be take away.

Mo and Teddy are solving:

$$\frac{6}{13} + \frac{5}{13} + \frac{7}{13}$$

Mo

The answer is 1 and $\frac{5}{13}$

Teddy

The answer is $\frac{18}{13}$

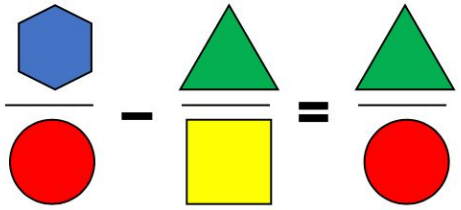
Who do you agree with?
Explain why.

They are both correct.
Mo has added $\frac{6}{13} + \frac{7}{13}$ to make 1 whole and then added $\frac{5}{13}$

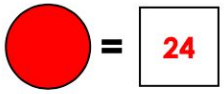
## Task 4

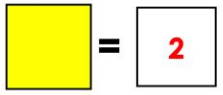
# Problem solving

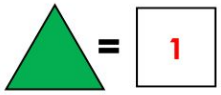
1. What could the value of each shape be?

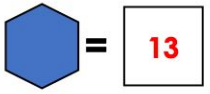


Various answers, for example:

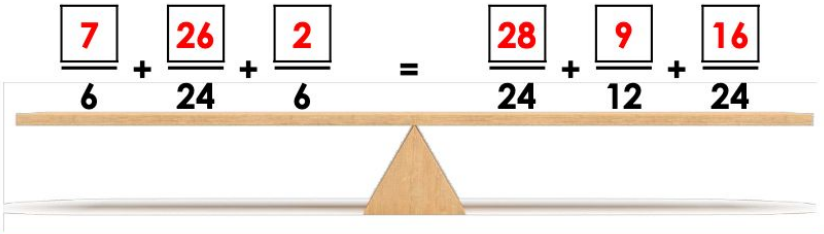



2. Daniel is trying to make the scales below balance by filling in the missing numerators.




**Rules**

1. Both calculations need to be equal to make the scale balance.
2. There are at least three improper fractions across the two calculations.
3. The answer is an improper fraction that is not a whole number.

Help Daniel to investigate the possible numerators to balance the scale.

Various answers, one example shown above.