

Year 4 Maths 22.05.20

Steppingstone activity

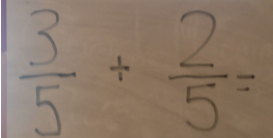
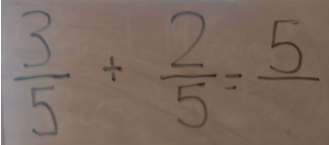
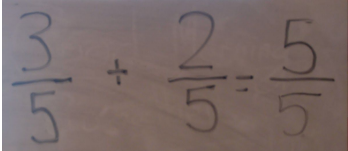
LO: To add and subtract fractions

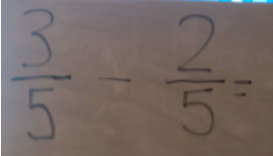
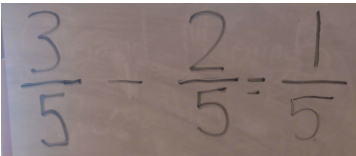
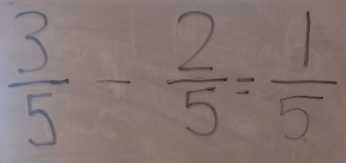
Success Criteria:

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

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

- A. $\frac{3}{12} + \frac{5}{12} + \frac{\boxed{2}}{12}$ **3**
B. $\frac{\boxed{3}}{12} + \frac{6}{\boxed{12}} + \frac{1}{12}$ **2**
C. $\frac{\boxed{3}}{12} + \frac{6}{\boxed{12}} + \frac{1}{12}$ **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.

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

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.

Year 4 Maths

Lesson 22.05.20

LO: To add and subtract fractions

Success Criteria:

- | |
|-----------------------------------|
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BBC Bitesize fractions: <https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/z9n4k7h>

Model:

1. $\frac{3}{5} + \frac{2}{5} =$

2. $\frac{3}{5} + \frac{2}{5} = \frac{5}{5}$

3. $\frac{3}{5} + \frac{2}{5} = \frac{5}{5}$

$$\frac{3}{5} - \frac{2}{5} =$$

$$\frac{3}{5} - \frac{2}{5} = \frac{1}{5}$$

$$\frac{3}{5} - \frac{2}{5} = \frac{1}{5}$$



3 ← **Numerator**
How many equal parts do you have?

4 ← **Denominator**
How many equal parts is the whole divided into?

Year 4 Maths Main activity**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. $13/5 - 7/5 = 6/5$

$$11. \quad 2 - 7/12 = 1 \frac{5}{12} \quad 12. \quad 3 - 9/12 = 2 \frac{3}{12}$$

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

$$13. \quad 3 - 5/16 = 2 \frac{11}{16} \quad 14. \quad 4 - 4/9 = 3 \frac{5}{9}$$

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

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.

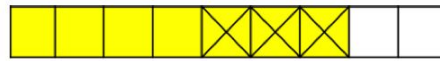
Annie and Amir are working out the answer to this problem.

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

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 $\frac{5}{13}$

