# Varied Fluency Step 8: Subtracting Fractions

## **National Curriculum Objectives:**

Mathematics Year 6: (6F4) Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

### **Differentiation:**

Developing Questions to support subtracting mixed numbers where denominators are the same or direct multiples of the same number.

Expected Questions to support subtracting mixed numbers where denominators are not always direct multiples of the same number.

Greater Depth Questions to support subtracting mixed numbers where denominators are not direct multiples of the same number. All answers simplified where possible.

More Year 6 Fractions resources.

Did you like this resource? Don't forget to <u>review</u> it on our website.



# **Subtracting Fractions**

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1a. Sophie is working out the answer to

$$4\frac{3}{4} - 1\frac{1}{2}$$



I think this calculation has a smaller answer than  $4\frac{3}{4} - 1\frac{6}{8}$ .

1b. Jay is working out the answer to



I think this calculation has the same answer as  $\frac{7}{3} - \frac{4}{6}$ .

Is Sophie correct?



2a. Solve the calculation below.

$$3\frac{2}{5} - 1\frac{1}{10} = ?$$

Is Jay correct?



2b. Solve the calculation below.

$$\frac{8}{6} - \frac{5}{12} = ?$$



3a. Which calculation is the odd one out?

$$\frac{8}{6} - \frac{2}{3}$$



3b. Which calculation is the odd one out?

A. 
$$5\frac{9}{10} - 3\frac{2}{5}$$
 B.  $4\frac{4}{5} - 2\frac{8}{10}$ 

$$4\frac{4}{5}-2\frac{8}{10}$$

$$5\frac{3}{5}-3\frac{1}{10}$$



4a. Mary is making lemonade.

She makes  $6\frac{2}{3}$  litres.

She then sells  $4\frac{2}{6}$  litres.





How much lemonade is left?



4b. Max is at a party.

He sees that  $\frac{11}{8}$  of the 2 cakes have gone.

The chocolate cake has  $\frac{3}{4}$  left.



How much is left of the vanilla?



# **Subtracting Fractions**

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5a. Aaron is working out the answer to  $3\frac{4}{5}-1\frac{6}{10}$ 



I think this calculation has the same answer as  $3\frac{8}{10} - 1\frac{6}{10}$ .

5b. Laila is working out the answer to



Is Laila correct?

I think this calculation has a greater answer than  $\frac{7}{4} - \frac{4}{9}$ .

Is Aaron correct?



6a. Solve the calculation below.

$$5\frac{5}{8} - 3\frac{2}{4} = ?$$

6b. Solve the calculation below.

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



7a. Which calculation is the odd one out?

$$\frac{12}{5} - \frac{4}{3}$$



7b. Which calculation is the odd one out?

A. 
$$4\frac{2}{3} - 1\frac{1}{4}$$
 B.  $4\frac{2}{6} - 1\frac{1}{2}$ 

$$4\frac{2}{6} - 1\frac{1}{2}$$

$$5\frac{11}{12}$$
 -  $2\frac{1}{2}$ 

8a. Alicia is baking some cakes.

She has  $4\frac{3}{4}$  bags of flour.

She uses  $2\frac{1}{8}$  bags to make the cakes.





How much flour does she have left?



8b. Thomas is on a sponsored run.

He has to run a total of  $\frac{20}{4}$  km.

So far, he has completed  $\frac{25}{12}$  km.



How much further does he have to run?



## **Subtracting Fractions**

# **Subtracting Fractions**

9a. Shanice is working out the answer to  $7\frac{5}{4} - 4\frac{3}{8}$ 



I think this calculation has the same answer as  $6\frac{4}{6} - 3\frac{5}{8}$ .

9b. Byron is working out the answer to



Is Byron correct?

I think this calculation has the same answer as  $\frac{8}{4} - \frac{5}{6}$ .

Is Shanice correct?



10a. Solve the calculation below. Give your answer in its simplest form.

$$7\frac{7}{12} - 4\frac{4}{5} = ?$$

10b. Solve the calculation below. Give your answer in its simplest form.

$$\frac{14}{6} - \frac{9}{7} = ?$$



11a. Which calculation is the odd one out?



$$\frac{6}{4} - \frac{13}{9}$$

$$\frac{8}{6} - \frac{9}{8}$$

$$\frac{12}{9} - \frac{9}{8}$$

11b. Which calculation is the odd one out?

$$5\frac{3}{5}-2\frac{2}{6}$$
 5.  $7\frac{6}{9}-4\frac{2}{5}$ 

$$7\frac{6}{9}-4\frac{2}{5}$$

$$5\frac{2}{5}-2\frac{2}{12}$$



12a. Ava went cycling at the weekend.

She cycled  $6\frac{3}{4}$  miles on Saturday.

She cycled  $\frac{9}{4}$  miles less on Sunday.



How far did she cycle on Sunday?



12b. Jamie is growing a sunflower.

In the first week it grew  $5\frac{3}{4}$  cm.

In the second week it grew  $\frac{9}{7}$  cm less.



How much did the it grow in week 2?



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## **Developing**

1a. Sophie is incorrect. Her calculation has a smaller answer.

2a. 
$$2\frac{3}{10}$$

4a. 
$$2\frac{1}{3}$$
 litres

### **Expected**

5a. Aaron is correct. Both calculations

have the same answer.

8a. 
$$2\frac{5}{8}$$
 bags.

#### **Greater Depth**

9a. Shanice is incorrect. The calculations

have different answers.

10a. 
$$2\frac{47}{60}$$

12a. 
$$5\frac{1}{4}$$
 miles.

#### **Developing**

1b. Jay is incorrect. The calculations have different answers.

2b. 
$$\frac{11}{12}$$

4b. 
$$\frac{5}{8}$$

### **Expected**

5b. Laila is incorrect. Her calculation has

the largest answer.

6b. 
$$\frac{22}{21}$$
 or  $1\frac{1}{21}$ 

8b. 
$$\frac{35}{12}$$
 or  $2\frac{11}{12}$ km.

#### **Greater Depth**

9b. Byron is incorrect. The calculations

have different answers.

10b. 
$$\frac{22}{21}$$
 or  $1\frac{1}{21}$ 

12b. 
$$4\frac{13}{28}$$
 cm.