

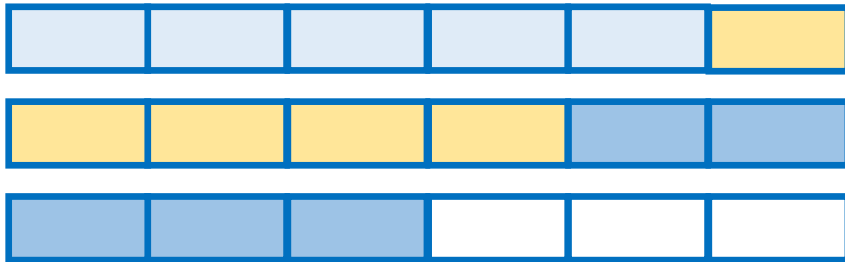


## YR5 PROGRESSION IN MASTERY LESSON PACK - FRACTIONS AS OPERATORS

### FLUENCY 1

Explain how Marlon has used the bar model to calculate.

$$3 \text{ lots of } \frac{5}{6}$$



Use the same method to work out...

$$4 \times \frac{3}{8}$$

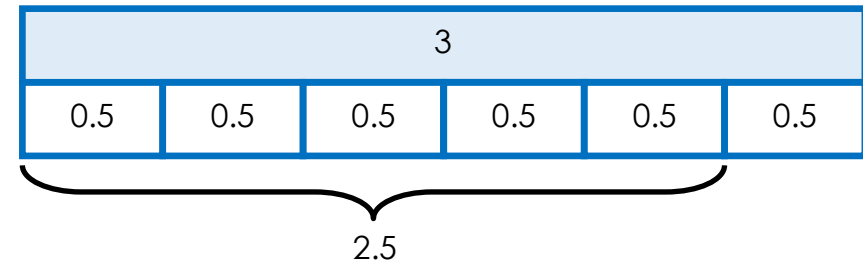
$$\frac{5}{12} \text{ multiplied by } 6$$

### FLUENCY 2

Compare the method used in Fluency 1 to this method.

What do you notice?

$$\frac{5}{6} \text{ of } 3$$



Use the same method to work out...

$$6 \times \frac{4}{6}$$

$$\frac{5}{9} \text{ multiplied by } 45$$

### FLUENCY 3

Calculate both and then circle the most efficient method.

$$2 \text{ lots of } \frac{4}{10} \quad \frac{4}{10} \text{ of } 2$$

$$\frac{2}{9} \times 3 \quad \frac{2}{9} \text{ of } 3$$

$$12 \text{ multiplied by } \frac{3}{4} \quad \frac{3}{4} \text{ of } 12$$



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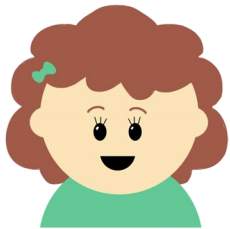


## YR5 PROGRESSION IN MASTERY LESSON PACK - FRACTIONS AS OPERATORS

### REASONING 1

The children are calculating in different ways...

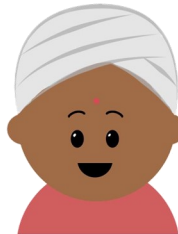
$$\frac{8}{12} \times 48$$



$$\frac{8}{12} \times \frac{48}{1} = \frac{384}{12} = 32$$

$$48 \div 12 = 4$$

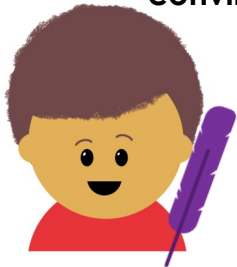
$$4 \times 8 = 32$$



Which method would you use? Why?

### REASONING 2

Show two methods to work out the following and then convince me which is the most appropriate.



Marlon has 243 feathers. He uses five ninths of them for his art project. How many feathers are not being used?

### REASONING 3

True or False?

$$12 \text{ lots of } 3 = \frac{4}{8} \text{ of } 96$$

$$\frac{7}{9} \times 450 = \text{one third of } 162$$

Prove it!

### REASONING 4

Are the statements correct? Convince me!

One eighth of 56 is the same as 56 divided by 8.

One sixth of 36 is the same as 36 lots of  $\frac{1}{6}$ .

$\frac{4}{5}$  of 25 is the same as 4 divided by 5 times 25.



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## YR5 PROGRESSION IN MASTERY LESSON PACK - FRACTIONS AS OPERATORS

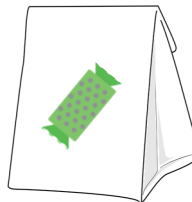
### PROBLEM SOLVING

Alfie had a bag of sweets.

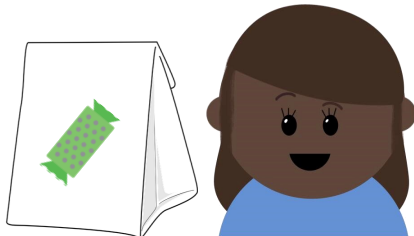


The bag split and one quarter of the sweets fell into a puddle.

He put the remainder of the sweets into a new bag and gave one sixth of them to Darcey.

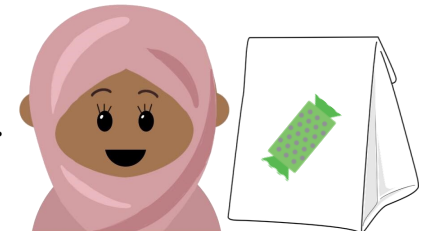


He ate one sevenths of the sweets that were left.



The following day, he gave one third of the sweets to Anita and Asha.

There were 10 sweets left for Alfie.



How many sweets did Alfie start with?



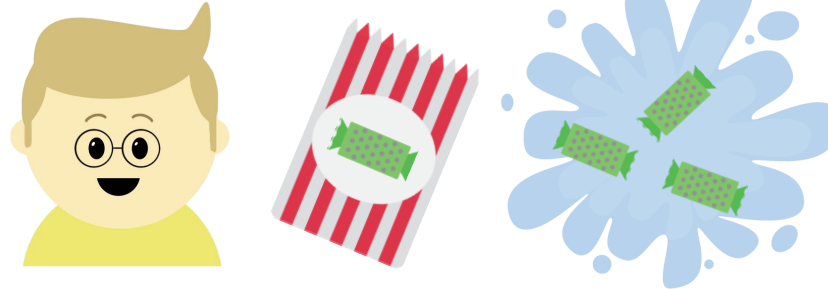
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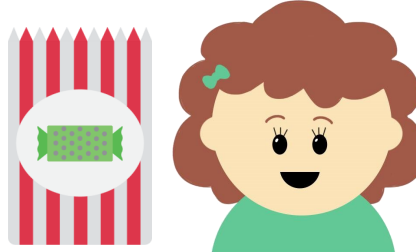
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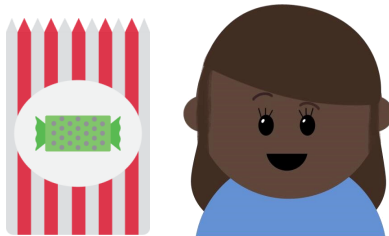
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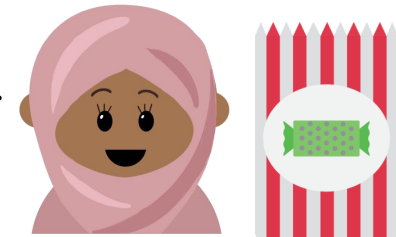


He ate one fifth of the sweets that were left.

The following day, he gave one third of the sweets to Anita and Asha.



There were 16 sweets left for Alfie.



How many sweets did he start with?

