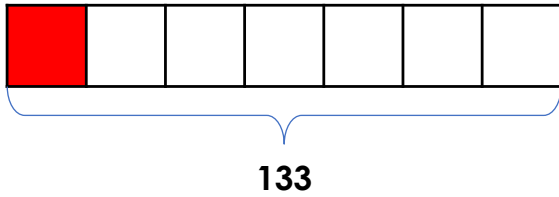# Fraction of an Amount

1a. My magazine has 133 pages. $\frac{1}{7}$ of the pages of contain adverts.

133

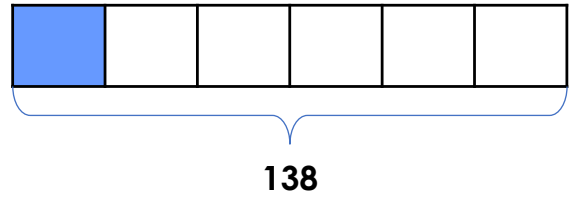How many pages of the magazine do NOT contain adverts?

⭐D

PS

Fraction of an Amount

1b. A shelf holds 138 books altogether. $\frac{1}{6}$ of the bookshelf has history books on it.
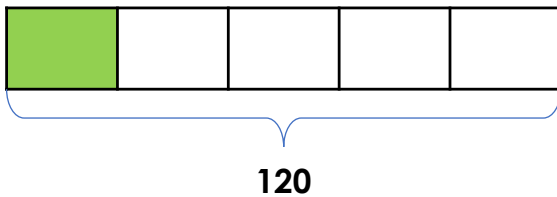

138

How many of the books are NOT history books?

⭐D

PS

2a. Kian has 120 stickers.

$\frac{1}{5}$ of the stickers are red. The rest are blue. 40 of the stickers are blue.
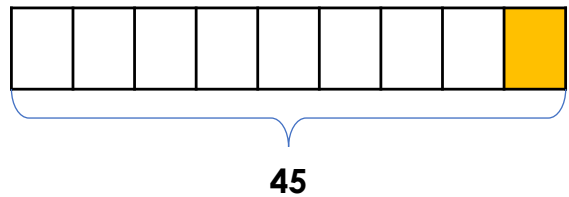
Kian

120

Is Kian correct? Convince me.

⭐D

R

2b. Paula has saved £45.

$\frac{1}{9}$ is for today's lunch. I will have £40 left to spend on flowers.

Paula

45

Is Paula correct? Convince me.

⭐D

R

3a. Use the cards to complete the statement below. Find 2 different solutions.

$$\frac{1}{\boxed{}} \text{ of } \boxed{} = \boxed{}$$

| 5 | 1 | 2 | 10 |

⭐D
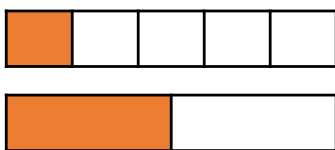
PS

3b. Use the cards to complete the statement below. Find 2 different solutions.

$$\frac{1}{\boxed{}} \text{ of } \boxed{} = \boxed{}$$

| 6 | 5 | 30 | 1 |

⭐D

PS

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Reasoning and Problem Solving – Fraction of an Amount – Year 6 Developing
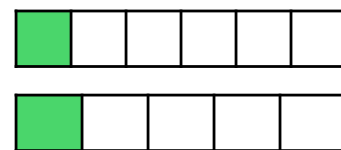
Fraction of an Amount

Fraction of an Amount

4a. A forest has 336 trees. $\frac{5}{8}$ of the trees are oak trees.

How many of the trees are NOT oak trees?

E · PS

4b. A chef makes 255 pizzas at a restaurant on Monday. $\frac{2}{5}$ of the pizzas made on Monday are Pepperoni.

How many pizzas made on Monday were NOT Pepperoni?

E · PS

5a. Liam and Tia are reading the same book which has 630 pages.

I have read $\frac{5}{9}$ of the book.

Liam

I have read $\frac{4}{7}$ of the book.

Tia

Who has read the most pages? Convince me.

E · R

5b. Amy and Simon are given £840 to share.

I have $\frac{6}{10}$ of the money.

Amy

I have $\frac{2}{5}$ of the money.

Simon

Who has the most money? Convince me.

E · R

6a. Use the cards to complete the statement below. Each card can only be used once in a statement. Find 2 different solutions.

$$\frac{\boxed{}}{\boxed{}} \text{ of } \boxed{} = \boxed{}$$

| 720 | 5 | 600 | 7 | 840 | 6 |

E · PS

6b. Use the cards to complete the statement below. Each card can only be used once in a statement. Find 2 different solutions.

$$\frac{\boxed{}}{\boxed{}} \text{ of } \boxed{} = \boxed{}$$

| 440 | 6 | 660 | 5 | 550 | 4 |

E · PS

Fraction of an Amount

7a. There are 720 cards in a shop. $\frac{12}{20}$ of the cards in the shop are birthday cards and $\frac{5}{15}$ of the cards are anniversary cards.

How many cards are NOT for birthdays or anniversaries?

GD

PS

7b. There are 864 people at a concert. $\frac{6}{18}$ of the people at the concert are male adults and $\frac{10}{16}$ of the people are female adults. The rest are children.

How many children are at the concert?

GD

PS

8a. Che and Mia are playing at the same school which has 960 children.

I know $\frac{12}{15}$ of the children.

Che

I know $\frac{12}{16}$ of the children.

Mia

Who knows the most children? Convince me.

GD

R

8b. Leo and Moses share £3,300.

I have $\frac{9}{12}$ of the money.

Leo

I have $\frac{5}{20}$ of the money.

Moses

Who has the most money? Convince me.

GD

R

9a. Use the cards to balance the statement below. Each card can only be used once in a statement. Find 2 different solutions.

$$\frac{\boxed{}}{\boxed{}} \text{ of } 200 = \frac{\boxed{}}{\boxed{}} \text{ of } 360$$

3	20	16	18	6	8

5	18

GD

PS

9b. Use the cards to balance the statement below. Each card can only be used once in a statement. Find 2 different solutions.

$$\frac{\boxed{}}{\boxed{}} \text{ of } 300 = \frac{\boxed{}}{\boxed{}} \text{ of } 240$$

3	16	2	10	15	8

10	20

GD

PS

Reasoning and Problem Solving – Fraction of an Amount – Year 6 Greater Depth

Reasoning and Problem Solving
Fraction of an Amount

Developing

1a. 114

2a. Kian is incorrect. 96 of the stickers are blue because $\frac{1}{5}$ of 120 = 24, 120 − 24 = 96.

3a. $\frac{1}{2}$ of 10 = 5; $\frac{1}{5}$ of 10 = 2

Expected

4a. 126

5a. Tia has read the most pages because $\frac{5}{9}$ of 630 = 350 and $\frac{4}{7}$ of 630 = 360.

6a. Various answers, for example:

$\frac{5}{6}$ of 720 = 600;

$\frac{5}{7}$ of 840 = 600;

$\frac{6}{7}$ of 840 = 720

Greater Depth

7a. 48

8a. Che knows the most children because $\frac{12}{15}$ of 960 = 768 and $\frac{12}{16}$ of 960 = 720.

9a. $\frac{3}{5}$ of 200 = $\frac{6}{18}$ of 360

$\frac{16}{20}$ of 200 = $\frac{8}{18}$ of 360

Reasoning and Problem Solving
Fraction of an Amount

Developing

1b. 115

2b. Paula is correct because $\frac{1}{9}$ of 45 = 5, 45 − 5 = 40.

3b. $\frac{1}{6}$ of 30 = 5; $\frac{1}{5}$ of 30 = 6

Expected

4b. 153

5b. Amy has the most money because $\frac{6}{10}$ of 840 = 504 and $\frac{2}{5}$ of 840 = 336.

6b. Various answers, for example:

$\frac{5}{6}$ of 660 = 550;

$\frac{4}{6}$ of 660 = 440;

$\frac{4}{5}$ of 550 = 440

Greater Depth

7b. 36

8b. Leo has the most money because $\frac{9}{12}$ of £3,300 = £2,475 and

$\frac{5}{20}$ of £3,300 = £825.

9b. $\frac{10}{20}$ of 300 = $\frac{10}{16}$ of 240

$\frac{3}{15}$ of 300 = $\frac{2}{8}$ of 240

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Reasoning and Problem Solving – Fraction of an Amount ANSWERS