

Ratio Problems – Homework

To share in a ratio, you usually begin by adding the values together. This gives you the total number of parts.

For example,

Alex and Charlie share some money in the ratio 2:3. What fraction of the money does Charlie get?

2 + 3 = 5

This means there are a total of 5 parts. Charlie gets 3 of these parts, so Charlie gets $\frac{3}{5}$ of the money.

Your Turn

- 1. Katy and AJ share some sweets in the ratio 4:7. What fraction of the sweets does AJ get?
- 2. Peter and Joy share some money. Peter gets $\frac{2}{9}$ of the money. Write the amount of money that Peter gets to the money Joy gets as a ratio in its simplest form.
- 3. Karen and Laurie share $\frac{2}{5}$ of a piece of cake in the ratio 1:3. What fraction of the whole cake does Karen get? Give your answer in its simplest form.
- 4. Joel and Layla share $\frac{3}{7}$ of a piece of cake in the ratio 2:3. What fraction of the whole cake does Joel get?
- 5. Amrita, Bill and Gary share some money. Amrita gets $\frac{1}{10}$ of the money, while Bill and Gary share the rest in the ratio 2:5. What fraction of the money does Gary get?

B

Ratio Problems – Homework Answers

To share in a ratio, you usually begin by adding the values together. This gives you the total number of parts.

For example,

Alex and Charlie share some money in the ratio 2:3. What fraction of the money does Charlie get?

2 + 3 = 5

This means there are a total of 5 parts. Charlie gets 3 of these parts, so Charlie gets $\frac{3}{5}$ of the money.

Your Turn

1. Katy and AJ share some sweets in the ratio 4:7. What fraction of the sweets does AJ get?

4 + 7 = 11
AJ gets
$$\frac{7}{11}$$
 of the sweets.

2. Peter and Joy share some money. Peter gets $\frac{2}{9}$ of the money. Write the amount of money that Peter gets to the money Joy gets as a ratio in its simplest form.

9 - 2 = 7

2:7

3. Karen and Laurie share $\frac{2}{5}$ of a piece of cake in the ratio 1:3. What fraction of the whole cake does Karen get? Give your answer in its simplest form.

1 + 3 = 4

Karen gets $\frac{1}{4}$ of the piece of cake.

$$\frac{1}{4} \times \frac{2}{5} = \frac{2}{20} = \frac{1}{10}$$

4. Joel and Layla share $\frac{3}{7}$ of a piece of cake in the ratio 2:3. What fraction of the whole cake does Joel get?

2 + 3 = 5

Joel gets $\frac{2}{5}$ of the piece of cake. $\frac{2}{5} \times \frac{3}{7} = \frac{6}{35}$

5. Amrita, Bill and Gary share some money. Amrita gets $\frac{1}{10}$ of the money, while Bill and Gary share the rest in the ratio 2:5. What fraction of the money does Gary get?

 $1 - \frac{1}{10} = \frac{9}{10}$ 2 + 5 = 7 Gary gets $\frac{5}{7}$ of the remaining money, $\frac{5}{7} \times \frac{9}{10} = \frac{45}{70} = \frac{9}{14}$