

Ratios 4b.

Sometimes we are given a ratio and a total and have to **calculate** from this how much each **ratio** is worth. For example: 3 boys collect stickers. For every sticker Bill collects, Faisal collects 2 and Roman collects 4. If the boys have 63 stickers all together between them, how many does each have?

Step 1: Find the ratio of each boy and add them together

Eg: Bill = 1; Faisal = 2; Roman = 4 So $1 + 2 + 4 = 7$

Step2: Find the total number of stickers and divide this by the answer to step 1.

Eg: 63 stickers divided by $7 = 9$

Step3: Now simply multiply each boy's ratio by the answer to step 2.

Eg: Bill = $1 \times 9 = 9$ stickers
Faisal = $2 \times 9 = 18$ stickers
Roman = $4 \times 9 = 36$ stickers

As a final check we add these numbers together and they total 63 which means the answers are correct.

Now try to find the ratio of these using the same method.

1. Three girls collect money for a charity. For every £1 Anna collects, Cara collects £4 and Brenda £6. If the girls collect £132 in total, how much did each collect for the charity?

2. A class has 36 children. The ratio of the class is 8 boys to 10 girls. How many boys and girls are there in the class?

3. A snooker player scores 77 points. For every red ball he pots he scores 1 point and for every pink ball 6 points. How many balls did he pot in total?

4. In a restaurant, for every burger sold, 5 drinks are also sold. If they sell 84 items in total, how many were drinks and how many were burgers?

Ratios 4 – ANSWERS

1. Anna = £12
Cara = £48
Brenda = £72
2. 16 boys
20 girls
3. 11 reds and 11 pinks = 22 balls
4. 14 burgers
70 drinks