Dividing into a ratio II
Lesson 8 of 8

Mathematics

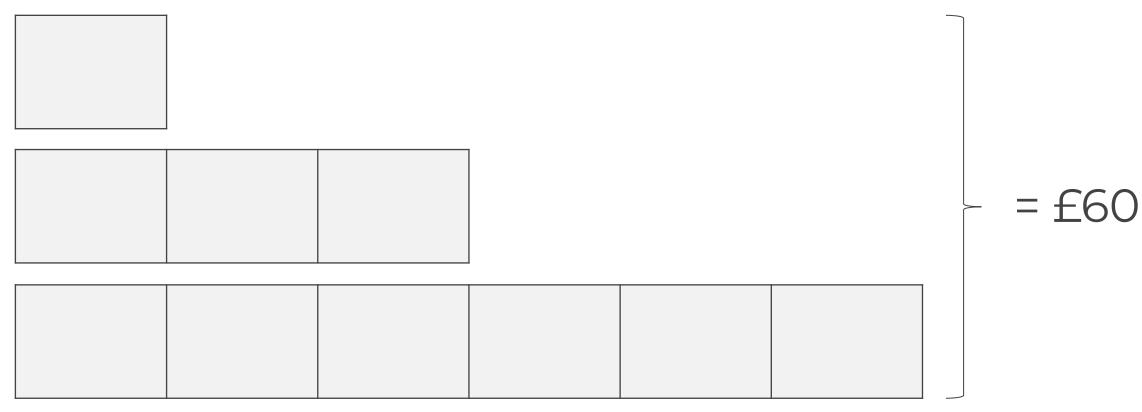Miss Kidd-Rossiter

Try this

Share £100 between three charities so that each charity gets an exact whole amount of pounds.

Express the sharing as a ratio _ : _ : _

What fraction of £100 is donated to each charity?

Connect

We can represent dividing £60 between charities in the ratio 1 : 3 : 6 using a bar model.

= £60

What is the donation to each charity?
What fraction of the total is donated to each charity?

Connect

Now draw your own bar models to represent dividing £60 between three charities in these ratios:

$1:2:3$ $3:4:5$ $N:N:N$

What fraction of the largest share is the smallest share?

Independent task

Share a donation of £120 in each of these ratios.

a. $1 : 1 : 2$
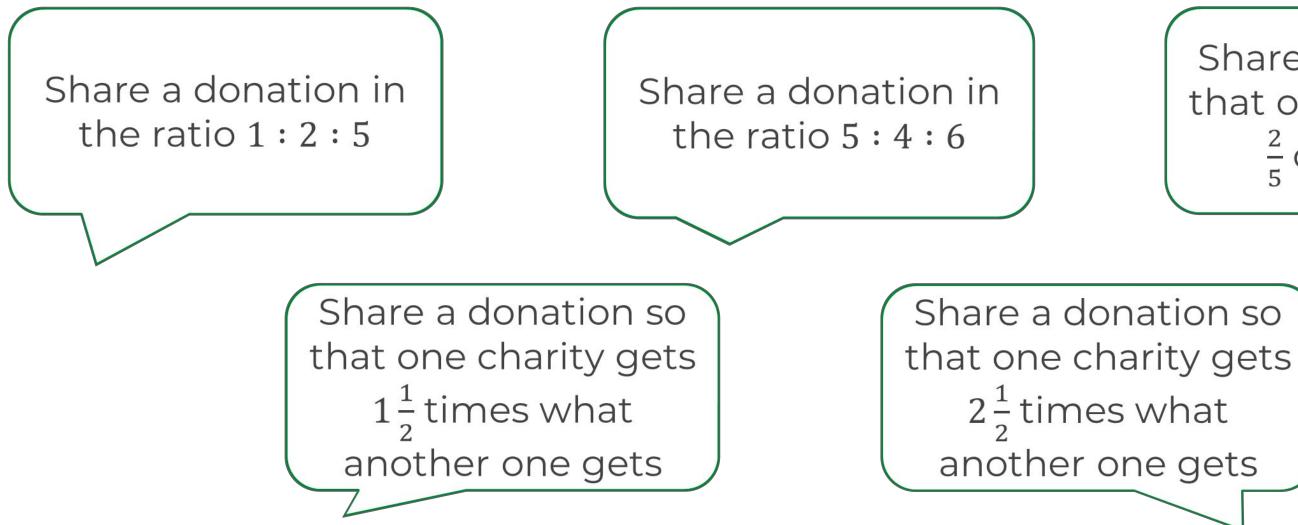
b. $1 : 2 : 3$

c. $2 : 2 : 4$

d. $2 : 2 : 2$

e. $2 : 2 : 6$
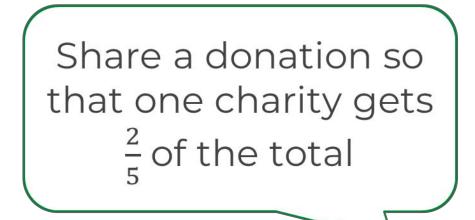
f. $n : n : 2n$

g. $n : 2n : 3n$ Use bar models to explain your reasoning each time.

h. $2n : 2n : 2n$ Can you explain anything you notice?

Independent task

Match the descriptions of sharing.

Share a donation in the ratio 1 : 2 : 5

Share a donation in the ratio 5 : 4 : 6

Share a donation so that one charity gets $\frac{2}{5}$ of the total

Share a donation so that one charity gets $1\frac{1}{2}$ times what another one gets

Share a donation so that one charity gets $2\frac{1}{2}$ times what another one gets

Explore

Antoni and Binh are each sharing **the same** amount of money between two charities.

I will share my money in the ratio 1 : 3

Antoni

Binh

I will share my money in the ratio 1 : 5

Together we're sharing in the ratio 2 : 8

Do you agree with Antoni?
Explain your reasoning using a bar model.