

Timester Challenge

Sharing into a Given Ratio



A piece of string is of length 48cm.
The length is divided into the ratio 3:5.
Work out the length of each part.

Bronze 

Lauren shares money between herself, Millie and Sana in the ratio of 3:4:5.
Millie gets £32. How much money should Lauren and Sana have?

Silver 

Jos is 11 years old.
Eva is 12 years old.
Keira is 13 years old.

Jos, Eva and Keira share £27 into the ratio of their ages.

Eva gives $\frac{2}{5}$ of her share to her sister.
How much money should Eva now have?

Bradley and Thomas share £300 into the ratio 7:5. Calculate how much more money Bradley receives to Thomas.

Bronze 

A shop sells hardback and paperback books.
In one week the number of hardback and paperback books sold were in the ratio of 3:8.
210 more paperback books were sold. How many books were sold all together?

Silver 

Gold 

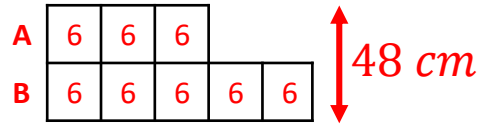
Timester Challenge

Sharing into a Given Ratio

Answers



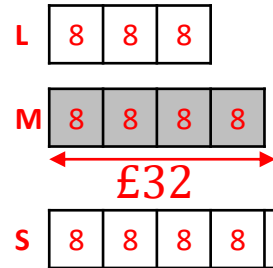
A piece of string is of length 48cm.
The length is divided into the ratio 3:5.
Work out the length of each part.



1 Box: $48 \div 8 = 6\text{cm}$
(3 × 6): (5 × 6)
18:30

Bronze ★

Lauren shares money between herself, Millie and Sana in the ratio of 3:4:5.
Millie gets £32. How much money should Lauren and Sana have?



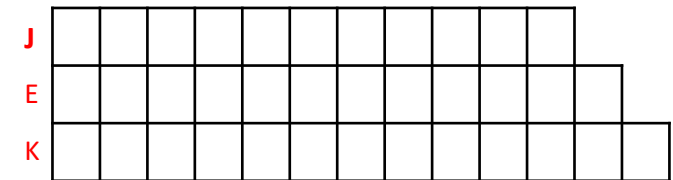
1 Box: $32 \div 4 = \text{£}8$
Lauren: $8 \times 3 = \text{£}24$
Sana: $8 \times 5 = \text{£}40$

Silver ★

Jos is 11 years old.
Eva is 12 years old. **11:12:13**
Keira is 13 years old.
Jos, Eva and Keira share £27 into the ratio of their ages.

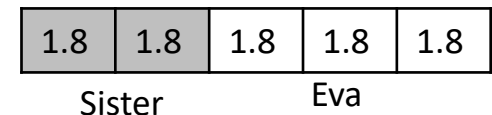
Eva gives $\frac{2}{5}$ of her share to her sister.

How much money should Eva now have?



$11 + 12 + 13 = 36$
1 box: $\text{£}27 \div 36 = \text{£}0.75$
Eva: $0.75 \times 12 = \text{£}9$

$\frac{2}{5}$ of £9



$\frac{9}{5} \times 2 = \text{£}3.60$ to sister.
Eva has $9 - 3.60 = \text{£}5.40$

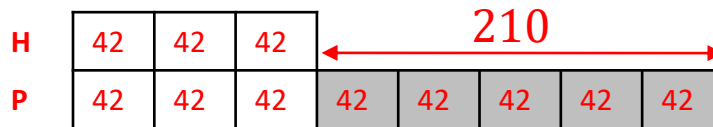
Gold ★

Bradley and Thomas share £300 into the ratio 7:5. Calculate how much more money Bradley receives to Thomas.



1 Box: $300 \div 12 = \text{£}25$
Bradley receives £50 more. Bronze ★

A shop sells hardback and paperback books. In one week the number of hardback and paperback books sold were in the ratio of 3:8. 210 more paperback books were sold. How many books were sold all together?



1 Box: $210 \div 5 = 42$
 $42 \times 11 = 462$ books sold. Silver ★