

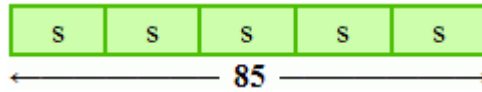
Multiplication and Division

Multiplication and **division** have to do with things or groups of the same size.

When you multiply the number of groups by the amount in each group (or the other way around), you get the total.

When you divide the total by the number of groups, you get the amount in each group.

When you divide the total by the amount in each group, you get the number of groups.



Five equal-size groups make a total of 85. We can write a fact family:

$$5 \times s = 85$$

$$s \times 5 = 85$$

$$85 \div 5 = s \quad \leftarrow \text{this calculation solves } s!$$

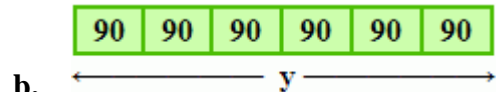
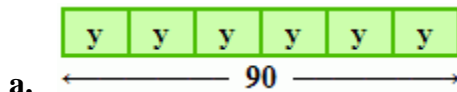
$$85 \div s = 5$$

1. Match an equation to each diagram. Solve for y .

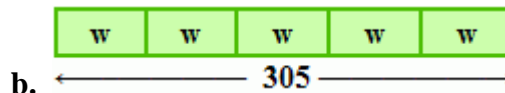
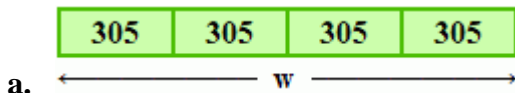
Equations:

$$6 \times y = 90$$

$$y \div 6 = 90$$



2. Write four equations for each diagram (a fact family). Then solve for w .



3. Draw a bar diagram to represent the equations. Then solve them.

a. $R \div 5 = 120$

b. $5 \times R = 120$