

LEARN  
1B

Maryann recorded the amount she spent in school over 5 days.

Day	Amount
Monday	\$2.10
Tuesday	\$1.60
Wednesday	\$1.80
Thursday	\$1.70
Friday	\$2.30

$$\text{Average} = \frac{\text{Total amount}}{\text{Number of data}}$$



What was the average amount Maryann spent each day?

$$\begin{aligned}\text{Total amount} &= \$2.10 + \$1.60 + \$1.80 + \$1.70 + \$2.30 \\ &= \$9.50\end{aligned}$$

$$\begin{aligned}\text{Average} &= \$9.50 \div 5 \\ &= \$1.90\end{aligned}$$

Maryann spent an average of \$1.90 each day.

## TRY

## 1A

The table shows the scores Huda obtained in 3 Mathematics Test.

Test	Test 1	Test 2	Test 3
Score	65	75	82

What was Huda's average score?

$$\begin{aligned}\text{Total score} &= 65 + 75 + 82 \\ &= \boxed{\quad}\end{aligned}$$

$$\begin{aligned}\text{Average} &= \boxed{\quad} \div \boxed{\quad} \\ &= \boxed{\quad}\end{aligned}$$

Huda's average score was  .

**TRY****1B**

Four students sold T-shirts for a fundraiser. The table shows the number of T-shirts each student sold.

Name	Allison	Munah	Carina	Rehna
Number of T-shirts	12	20	16	28

What is the average number of T-shirts each student sold?

**LEARN****2**

The average length of 4 ribbons was 8.25 cm. What was the total length of the ribbons?

$$\begin{aligned}\text{Total length} &= 8.25 \times 4 \\ &= 33 \text{ cm}\end{aligned}$$

The total length of the ribbons was 33 cm.

**TRY****2A**

Cheryl spent all of her allowance in 5 days. She spent an average of \$3.50 each day. How much did she spend altogether in the 5 days?

$$\$ \quad \quad \quad = \$ \quad \quad$$

She spent \$   altogether in the 5 days.

**TRY****2B**

Ravi runs an average distance of 800 m each day. Find the total distance he runs in 5 days. Give your answer in kilometres.   km

**LEARN****3**

The total mass of some identical boxes was 96 kg. The average mass of one such box was 8 kg. How many boxes were there?

$$\begin{aligned}\text{Number of boxes} &= 96 \div 8 \\ &= 12\end{aligned}$$

There were 12 boxes.



## Hands-On Activity

Relate average, total number or total amount and number of data.

Work in pairs.

1 The table shows the number of coloured shirts Mr Tan has.

Colour	Pink	White	Blue
Number of Shirts	2	8	5

Find the average number of shirts Mr Tan has. Tell your partner the information needed to find the average.

2 What do you notice about the relationship between the information that you need and average?

3 Solve the following.

a Average = 7, Total number = 84  
Find the number of data.

b Average = 25, Number of data = 4  
Find the total number.

4 What do you notice about the relationship between average, total number or total amount and number of data?

TRY

3A

Jane had \$60. She spent an average of \$5 each day. How many days did she take to spend all her money?

$$\text{[green box]} + \text{[green box]} + \text{[green box]} = \text{[green box]}$$

She took   days to spend all her money.

TRY

3B

The average number of flowers in a vase is 8.

There is a total of 120 flowers.

How many vases are there?

TRY

3c

The masses of 5 pupils are shown in the table below. However, the total mass of the girls was left out.

Pupils		Total Mass
Girls	Linda, Elsa	?
Boys	Alvin, Chris, George	104 kg

The average mass of the 5 pupils is 32.8 kg.  
Find the average mass of the girls.

$$\begin{aligned}\text{Total mass of pupils} &= \text{[3 green rectangles]} \\ &= \text{[1 green rectangle]} \text{ kg}\end{aligned}$$

$$\begin{aligned}\text{Total mass of girls} &= \text{[2 green rectangles]} \\ &= \text{[1 green rectangle]} \text{ kg}\end{aligned}$$

$$\begin{aligned}\text{Average mass of girls} &= \text{[1 green rectangle]} \\ &= \text{[1 green rectangle]} \text{ kg}\end{aligned}$$

The average mass of the girls was [1 green rectangle] kg.

TRY

3d

Patrick, Michael, Thomas and John took part in a darts competition. Their average score was 78. What was their total score? [1 green rectangle]