Problem of the Week
Problem A and Solution
Counting Kits

Problem

Squirrels have babies twice each year, usually in March or April and again in July or August. Baby squirrels are called kits and a group of kits in one birth is called a litter.

The table below shows the number of kits a squirrel had over four years.

Month and Year of Birth	Number of Kits in the Litter
March 2020	4
July 2020	8
April 2021	6
August 2021	3
March 2022	5
August 2022	4
April 2023	6
July 2023	4

What is the average (mean) number of kits the squirrel had in a litter?

Solution

We can calculate the average by finding the total kits born and then dividing the total by the number of litters.

The total number of kits born was $4 + 8 + 6 + 3 + 5 + 4 + 6 + 4 = 40$.

Since there were 8 litters, the average number of kits born in a litter was $40 \div 8 = 5$.

Calculating the average can also be thought of as a fair share problem. In this case, we want to evenly distribute 40 kits over 8 litters. We could arrange 40 tokens so that there is an equal number of tokens in each of 8 piles. We could also start with stacks of blocks representing the number of kits born in each litter. Then we move blocks, one at a time, from the higher stacks to the lower stacks until all the stacks have the same number of blocks.