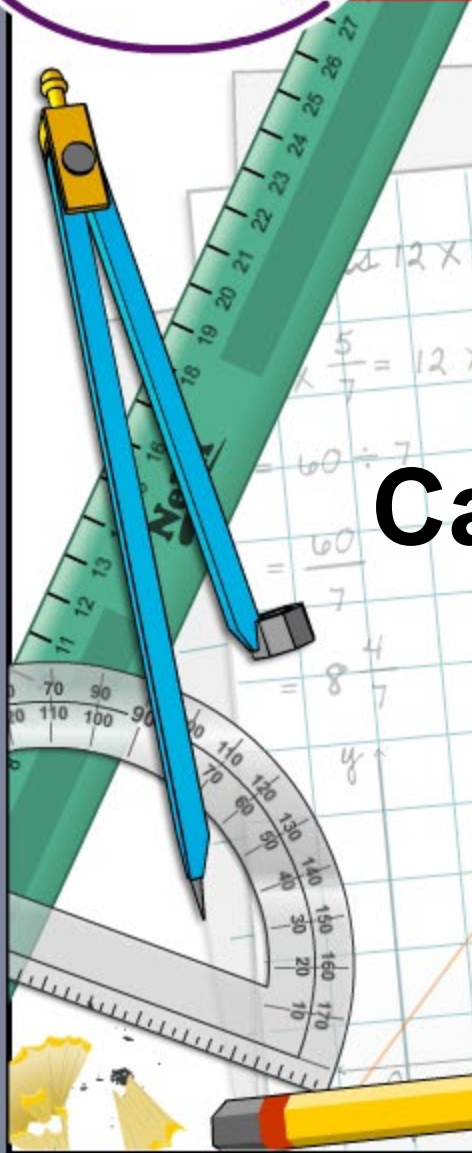
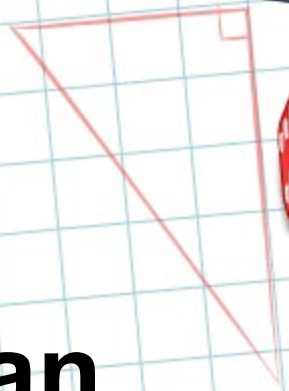




## Calculating the Mean

$$12 \times \frac{5}{7} ?$$
$$\frac{5}{7} = 12 \times 5 \div 7$$
$$= 60 \div 7$$
$$= \frac{60}{7}$$
$$= 8 \frac{4}{7}$$



## Common core icons



This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.



Slides containing examples of mathematical modeling are marked with this stamp.



This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

- 1) **Make sense of problems and persevere in solving them.**
- 2) **Reason abstractly and quantitatively.**
- 3) **Construct viable arguments and critique the reasoning of others.**
- 4) **Model with mathematics.**
- 5) **Use appropriate tools strategically.**
- 6) **Attend to precision.**
- 7) **Look for and make use of structure.**
- 8) **Look for and express regularity in repeated reasoning.**



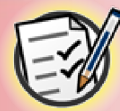
This icon indicates that the slide contains activities created in Flash. These activities are not editable.



This icon indicates teacher's notes in the Notes field.

# The mean

MODELING



board  
works

Anna thinks her allowance of \$5 a week is too low. She wants to find out what the average allowance in her neighborhood is, so she asks some of her friends how much they receive.





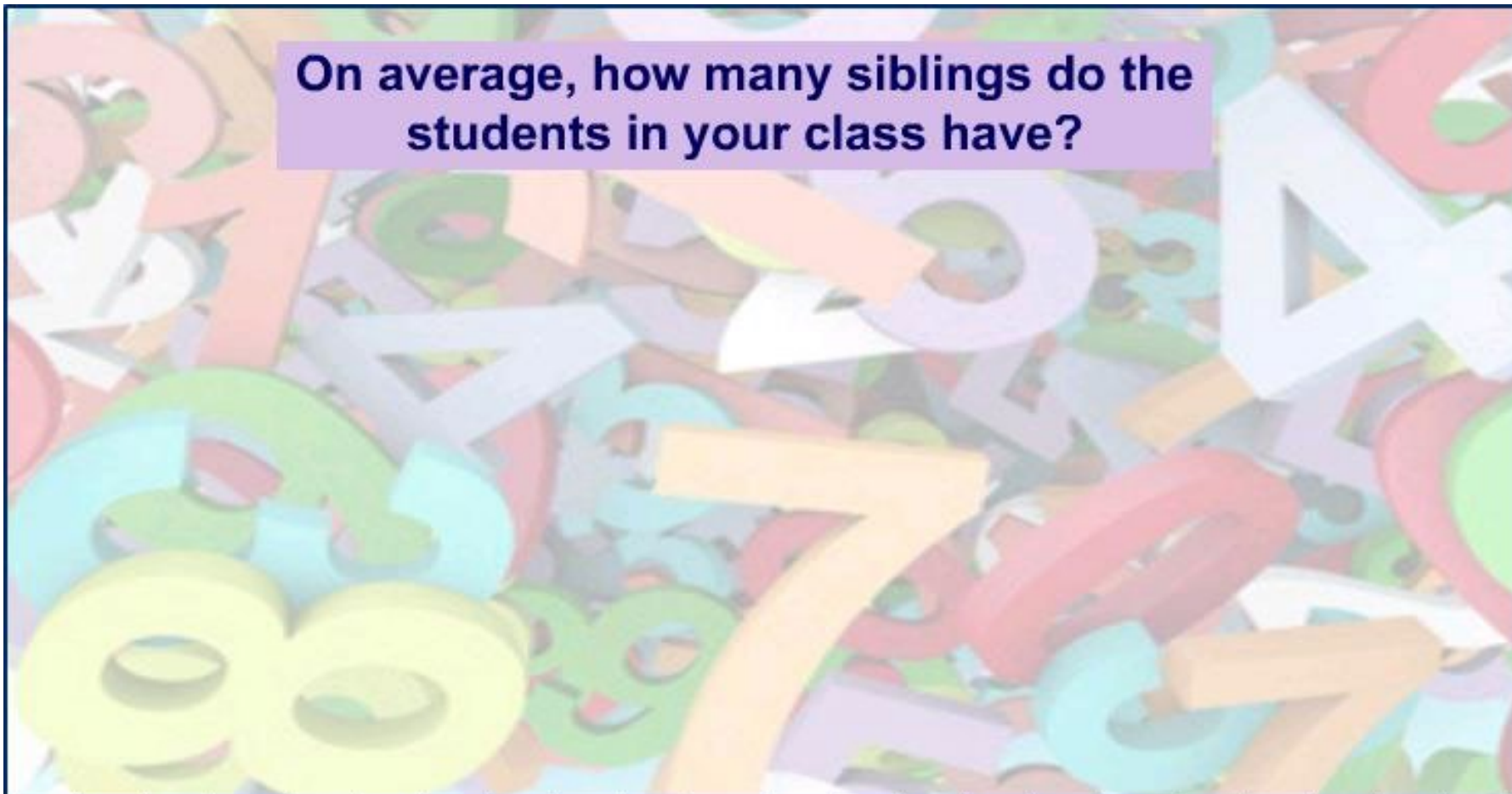
# Take a survey

MODELING



board  
works

On average, how many siblings do the students in your class have?





Kieran wanted to know how much TV the average student at his school watched each week, so he took a survey and recorded his results in the table below. What is the mean?

Hours	0	1	2	3	4	5	6	Total
Students								
Frequency	2	6	12	6	9	9	7	51
Total	0	6	24	18	36	45	42	171

What is the total number of hours watched? **171**

What is the total number of students? **51**

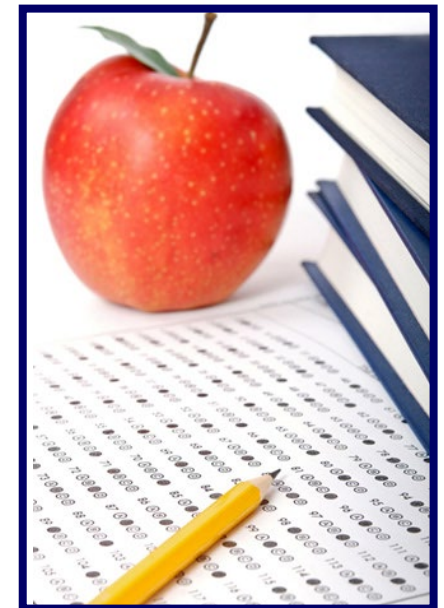
Mean number of hours watched each week =  $171 \div 51 =$

**3.35 hours**



Ladarius has listed his grades below. What is his average in each class? What is his best subject?

Social Studies	95	80	98	93	90			91.2
Math	100	75	82	96	89	88	94	89.1
Science	72	79	84	95	86	88		84
English	99	91	86	90	99	91	87	91.9
Music	95	100	70	80				86.3



Ladarius has the highest grade in **English**.

