

Division - Changing Estimates

There are 170 students who will participate in Sports Day. They need to be divided into 28 groups. How many students will be in each group? How many students will be left over?

We divide 170 by 28.
Think....28 rounds to 30.

$3 \overline{)17}$ is about 5.

$$\begin{array}{r} 5 \\ 28 \overline{)170} \\ \underline{-140} \\ 30 \end{array}$$

30 is larger than 28.
The guess is too small. Try 6.

$$\begin{array}{r} 6 \\ 28 \overline{)170} \\ \underline{-168} \\ 2 \end{array}$$

2 is less than 28.
This guess is correct.



There will be 6 students in each group.
There will be 2 students left over.

Sometimes our guess is too large or too small, and we need to adjust it up or down.

- 1 Find each quotient. Many of your original guesses will be incorrect.

$72 \overline{)634}$

$78 \overline{)628}$

$24 \overline{)1,761}$

$54 \overline{)1,592}$

$89 \overline{)2,416}$

$64 \overline{)1,832}$

$14 \overline{)9,867}$

$23 \overline{)1,590}$