

Age 11+ Level ** Worksheet 1

1. Charlie's Money

Charlie spent $\frac{1}{4}$ of his money on a book, and then gave his brother $\frac{2}{3}$ of what was left, and still had £9 remaining.

How much money did he start off with?

2. Pride of Place

The fractions $\frac{1}{3}$ and $\frac{1}{5}$ have been placed on the number-line shown. At which position should the fraction $\frac{1}{4}$ be placed?



3. Three Blind Mice

The three blind mice stole a piece of cheese. In the night, the first mouse ate $\frac{1}{3}$ of the cheese. Later, the second mouse ate $\frac{1}{3}$ of the remaining cheese.

Finally, the third mouse ate $\frac{1}{3}$ of what was then left of the cheese.

What fraction of the cheese is left?

4. Halfway

What number is halfway between $-\frac{2}{3}$ and $\frac{4}{5}$?

5. Magical Products

Put the nine numbers below onto a 3 by 3 grid so that each number occupies one space, and the product of every row, column and diagonal is equal to 1.

1 2 3 6 $\frac{1}{6}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{2}$

These problems are adapted from UKMT (ukmt.org.uk) and WMC (competition.ac) problems.