

**Age 11+ Level ★  
Worksheet 1****1. Mathematical Ages**

Here are the dates of three pivotal female mathematicians:

Sophie Germain (French) 1776-1831

Sonja Kowalevsky (Russian) 1850-91

Emmy Noether (German) 1882-1935

Arrange them in order with the shortest-lived first.

**2. Different Magic Square**

In a magic square, the three numbers in each row, in each column, and in each diagonal add up to the same number.

13		
	10	
9		7

Complete this magic square.

**3. Quiz Questions**

A quiz has twenty questions with 7 points awarded for each correct answer, 2 points deducted for each wrong answer and 0 for each question omitted.

Jack scored 87 points.

How many questions did he omit?

**4. Debt Recovery**

Tony owes Tina 40p.

Then Tina borrows 50p from Tony.

Later Tony gives Tina 60p.

Who has to pay what to whom to square things up?

**5. Loose Change**

In how many ways can you give change for a ten pence piece?

*(You can use 1p, 2p and 5p coins when giving change)*

*These problems are adapted from UKMT ([ukmt.org.uk](http://ukmt.org.uk)) and WMC ([competition.ac](http://competition.ac)) problems.*