

## **Maths exercises and puzzles 22/04/20**

These maths exercises should be done after morning tea. There is no need to complete all 3 sheets, nevertheless approximately 1 hour should be spent on them.

You can choose which one you would like to start with.

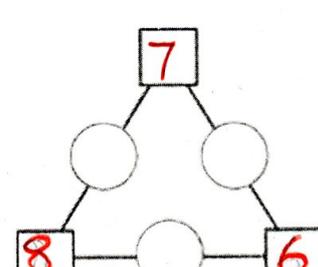
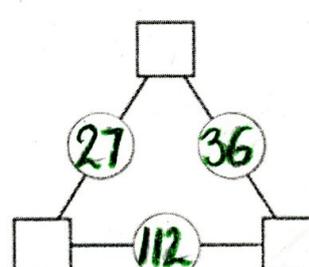
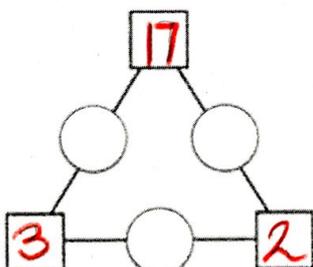
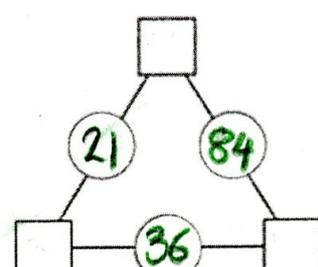
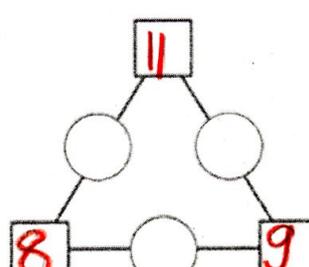
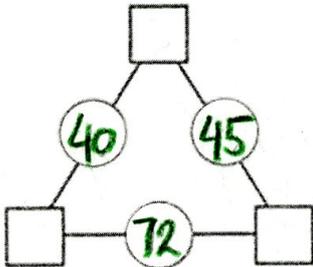
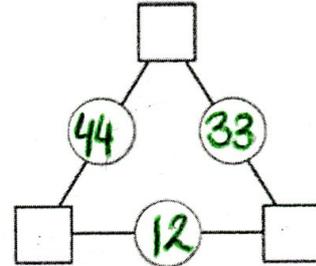
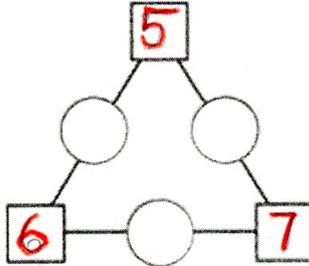
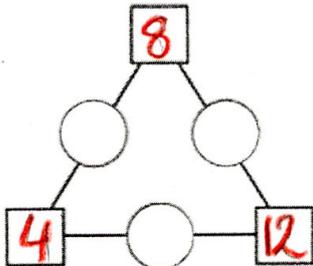
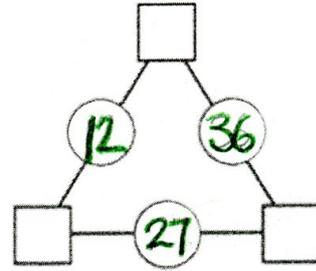
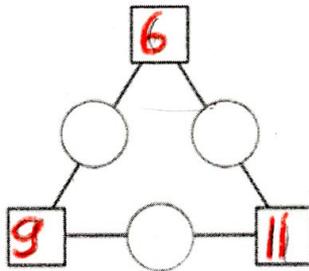
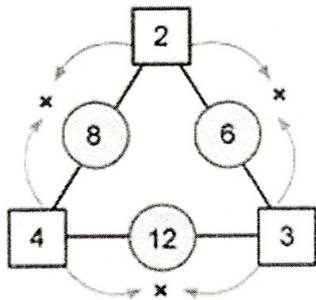
The first sheet is a warm up that has a number of multiplication triangles.

The second sheet has a variety of maths tasks of varied difficulty

And the last sheet, to end this practice session is a puzzle.

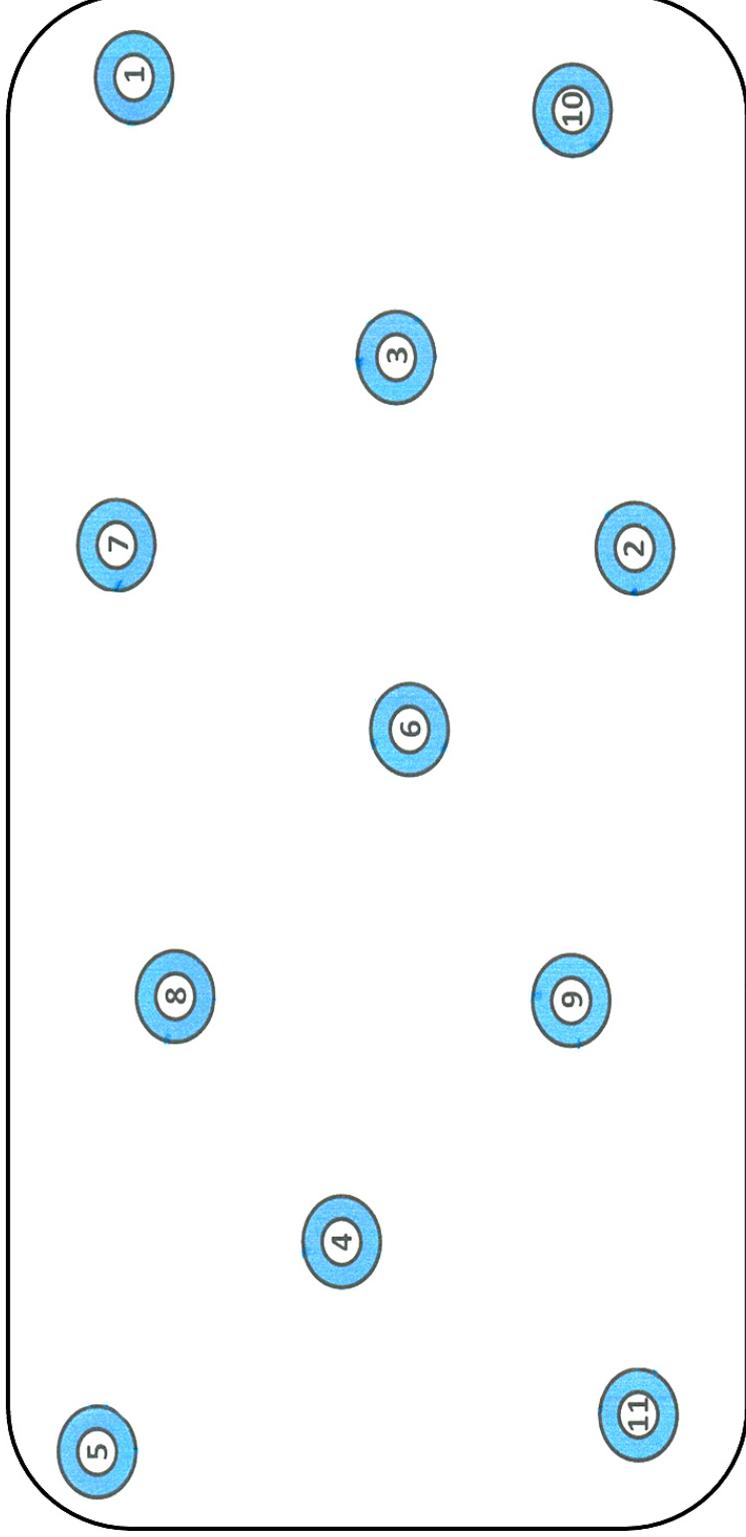
### Multiplication triangles

Complete the multiplication triangles below. The numbers at the corners of the triangles multiply together to make the answer in the middle. You can use any multiplication method you prefer, the first one has been completed for you.



### Quick maths

- 1 ... + ... + ... = 53
  - 2 How many 5's make up 35?
  - 3 ... x ... = 24
  - 4 I doubled the number added 5 and got 13. What was the number?
  - 5 It is 2.45a.m. How many hours and minutes until midday? (think whether you need to count forward or backward)
  - 6  $190 - \dots = 95$
- 
- 7 What is one seventh of 49?
  - 8 Half of 676 =
  - 9  $\$17.45 + \$29.65 =$
  - 10  $79 + \dots = 119$
  - 11  $\dots + 39 + \dots = 84$
  - 12  $27 + 63 =$
  - 13 What is one seventh of 350?
  - 14 It is 6.45 a.m. How many hours and minutes ago was midnight?
  - 15  $1/7$  of 54 =
  - 16 I tripled the number, took away 5 and got 22. What was the number?
  - 17 4 times 5 times 5 take away 85 then divide by 3
  - 18  $6713 + 2502 + 62 + 625 =$
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- 19 420 shared between 7 =
  - 20 John went on a hike. His walking speed was 4km an hour. He walked 9 hours a day for 3 days. What distance did John cover in this time?
  - 21 Convert these decimal fractions in to common fractions: 3.05; 5.4; 0.08
  - 22 Convert  $25/7$  to a mixed fraction and simplify if possible.
  - 23 To solve these equations, you will need to solve the multiplications before you do the addition. First one is done for you.  $7 + (11 \times 4) = 51$   
 $483 - 76 + (7 \times 8) =$   
 $(17 \times 12) - 95 + 43 =$
  - 24 I had \$87.45. First, I've spent \$19.90, then \$23.70 and finally \$29.25. How much money was I left with?



What is the combination?

A jewel box had a combination lock that opened when the proper buttons were pushed.

These buttons on the top cover of the jewel box, are shown above.

One day, the owner of the jewel box forgot the combination of the lock. She did remember that she had to start with 10 and end with 11 and that only numbers joined by lines could be pushed one after another and that the sum of the numbers pushed was 50.

Can you work out the sequence of numbers to open the lid?