

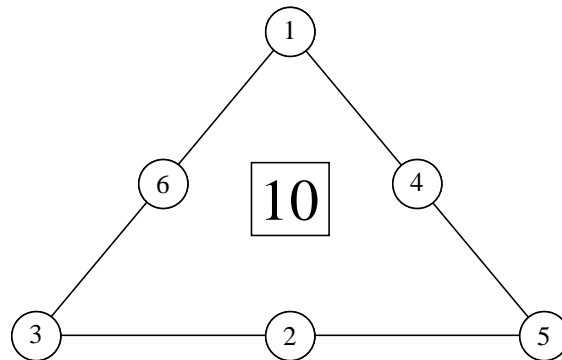


# Neurological Nasties XVIII

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1. The numbers 1, 2, 3, 4, 5 and 6 have been arranged in the following *magic triangle* so that the sum of the numbers along each side is always the same, 10.



Arrange the following sets of numbers to form magic triangles:

- (a) 1 2 3 5 6 7
- (b) 1 2 3 4 6 7
2. (a) 56 406 is the product of two consecutive numbers. What are the two numbers?
- (b) 357 627 is the product of three consecutive odd numbers. Find them!
- (c) 1405 is the sum of two consecutive square numbers. What are they?
3. Frances Flatfingers had a number of congruent square paving slabs which she arranged to form two larger square sections of about the same area as each other.
- Being an astute mathematician she realised that the same number of paving slabs could be used to produce two more square sections but this time with one much larger than the other.
- How many paving slabs did Frances have?