

26.02.24

Number Nest Weekly Challenge



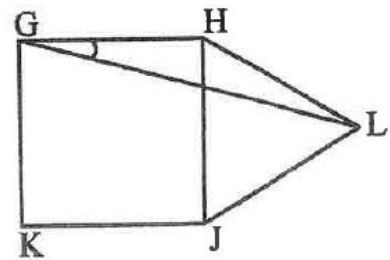
Warm up

- Approximately what is the height of an average ant?
i) **1mm** ii) 1 foot iii) 1m iv) 1km v) 1 mile
- My sister plays on her computer game for 15 hours each day. How many hours will she have played on her computer in a week? **105 hours**
- If **2 CLICK 3** means double 2 and add 3, what is the value of **4 CLICK 5**? **13**
- Angles in a triangle add up to **180** degrees.
- I think of a number, multiply it by three, subtract zero from it and get zero as my answer. What was my number? **0**
- List all the prime numbers between 10-99.

11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

Activity

- GHJK is a square. JHL is an equilateral triangle. What is the size of angle HGL? **15°**
- A shop reduces its prices by 20% in a sale. I bought a coat for £60 in the sale. How much would it have cost me before the sale? **£75**
- 83 is a prime number. If we reverse the order of its digits we get 38 which is not a prime number. How many 2-digit prime numbers do give prime numbers when their digits are reversed? **9**
They are 11, 13, 17, 31, 37, 71, 73, 79, 97.
- If all the whole numbers less than 100 are put in alphabetical order what is the fourteenth number in the list? **Fifty**
- I am Mr K Otic. In my sock drawer there are 4 grey socks, 8 brown socks and 6 blue socks all mixed together. If I take socks out the drawer in the dark, what is the least number I need to take to be sure of getting a matching pair? **4**
- Which is the best value for money?



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a) **£2.95 per kg**

b) $2\frac{1}{2}$ kg for £7.50

c) 31p per 100g

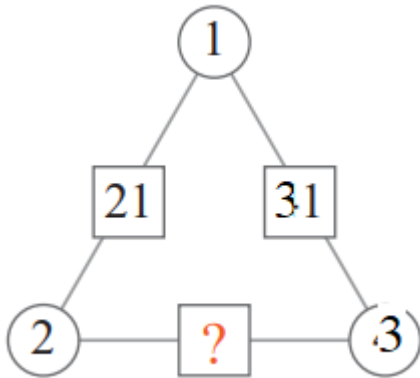
d) 500g for £1.49

e) £1.30 per pound

Remember 1kg \approx 2.2lbs

Challenge

What is the missing number in this puzzle?



The answer is **32**. 21 was the biggest number that could be made from the digits 2 and 1, likewise with 31.