



1	Find the sum of $2 + 4 + 6 + \dots + 16$.
2	Calculate 4 times 6 times 7.
3	What is the probability of flipping 2 heads and 3 tails if you flip a coin 5 times?
4	A square and rectangle have the same area which is 36. If the side lengths of the rectangle differ by 5, which has a bigger perimeter?
5	What is the biggest square number smaller than 1000?
6	In how many ways can you arrange the word PHYSICS?
7	What is the difference between the largest 3 digit number divisible by 11 and the smallest 4 digit number divisible by 17?
8	In a farm, there are cows and chickens. A cow has 4 legs and a chicken has 2 legs. There are a total of 23 heads and 66 legs. How many chickens are there?
9	60% of 70% of a number is 84. What is the number?
10	How many 3 digit integers are divisible by 13?
11	How many seconds are in 2 and a half days?
12	If $x + 3 = 7$ and $y + 4 = 9$, what is $x^2 - 2xy + y^2$?
13	How many prime numbers are less than or equal to the number 98?
14	I have a magic number X. If I divide this by 3 I get a remainder of 2. If I divide this by 4 I get a remainder of 3. If I divide this by 5 I get a remainder of 4. If I divide this by 6 I get a remainder of 5. What is the smallest possible positive value of X?
15	If $5a = b$, $2b = 3c$, and $4c = 7d$, what is $2a$ in terms of d ? Express your answer as a decimal.