

01 Identify the largest four-digit number which is a perfect cube.

Your solution here:

02 The product of 1815 and m is a square number. Find the smallest possible value of m .

Your solution here:

03 The number of students in Woodlands Primary School in the year 2012 was a square number. The number of students there in the year 2013 was also a square number and it was 101 more than the number of students in 2012. What was the number of students in the year 2013 ?

Your solution here:

04 If $1^3 + 2^3 + \dots + 9^3 = 2025$, find the closest value of $(0.11)^3 + (0.22)^3 + \dots + (0.99)^3$.

Your solution here:

05

Observe the following pattern.

$$1^3 = 1$$

$$1^2 + 2^3 = (1 + 2)^2$$

$$1^3 + 2^3 + 3^3 = (1 + 2 + 3)^2$$

Write the next three rows and calculate the value of $1^3 + 2^3 + 3^3 + \dots + 9^3 + 10^3$ by given pattern.

Your solution here: