

Name & Surname: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_

 Grade 6 & 7 2025 # 24 Hand in by Thurs 21 August

Katie writes a different positive integer on the top face of each of the fourteen cubes in the pyramid shown.

The sum of the nine integers written on the cubes in the bottom layer is 50. The integer written on each of the cubes in the middle and top layers of the pyramid is equal to the sum of the integers on the four cubes underneath it.

What is the greatest possible integer that she can write on the top cube?

A 80 B 98 C 104 D 118 E 128



|  |  |  |
| --- | --- | --- |
| 4 | 8 | 3 |
| 6 | 14 | 5 |
| 2 | 7 | 1 |

|  |  |
| --- | --- |
| 32 | 30 |
| 29 | 27 |

Therefore, biggest total is 118