



13. A cube is placed with one face on square 1 in the maze shown, so that it completely covers the square with no overlap. The upper face of the cube is covered in wet paint. The cube is then 'rolled' around the maze, rotating about an edge each time, until it reaches square 25. It leaves paint on all of the squares on which the painted face lands, but on no others. The cube is removed on reaching the square 25. What is the sum of the numbers on the squares which are now marked with paint?

5	6	7	8	9
4	19	20	21	10
3	18	25	22	11
2	17	24	23	12
1	16	15	14	13

A 78

B 80

C 82

D 169

E 625

1283



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13. B The table below shows the position of the face marked with paint when the base of the cube is on the 25 squares. Code: T - top, B - base; F - front; H - hidden (rear); L - left; R - right.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
T	Н	В	F	T	R	В	L	T	F	В	Н	T	L	В	R	R	R	R	В	L	L	L	В	F

So the required sum is 3 + 7 + 11 + 15 + 20 + 24 = 80.