Cube and Cube-roots

1)(i) 1 (ii) 2 (iii) 9 (iv) 5 (v) 4

(vi) 3 (vii) 8 (viii) 7

2) 6 and (n-1)

$\Rightarrow 6 \times 5 + 1 = 31$

31, 33, 35, 37, 39 + 41 = 216

(ii) $(8 \times 7) + 1 = 57$

$= 57 + 59 + 61 + 63 + 65 + 67 + 69 + 71$

$= 512$

(iii) $(6 \times 6) + 1 = 43$

$\Rightarrow 43 + 45 + 47 + 49 + 51 + 53 + 55 = 343$

3)(i) No (ii) yes (iii) yes (iv) yes

(v) No (vi) yes (vii) No (viii) yes

4) 392 is not a perfect cube
so, 7 must multiplied to get perfect cube.

5) 53 240 is not a perfect cube, so more 5 is required to be a perfect cube.

6) 1188 is not a perfect cube so, more $2 \times 2 \times 11$ is required.

7) 68600 is not a perfect cube so, we should multiply 5 to it.