Cubes and Cubes Roots Ex 4.1 Q19

Answer :

(i)

We have to find the cube of 35 using column method. We have: $a = 3$ and $b = 5$

Column I a^3	Column II $3 \times a^2 \times b$	Column III $3 \times a \times b^2$	Column IV b^3
$3^3 = 27$	$3 \times a^2 \times b = 3 \times 3^2 \times 5 = 135$	$3 \times a \times b^2 = 3 \times 3 \times 5^2 = 225$	$5^3 = 125$
+15	+23	+ 12	125
42	158	237	
42	8	7	5

Thus, cube of 35 is 42875.

(ii)

We have to find the cube of 56 using column method. We have: $a = 5$ and $b = 6$

Column I a^3	Column II $3 \times a^2 \times b$	Column III $3 \times a \times b^2$	Column IV b^3
$5^3 = 125$	$3 \times a^2 \times b = 3 \times 5^2 \times 6 = 450$	$3 \times a \times b^2 = 3 \times 5 \times 6^2 = 540$	$6^3 = 216$
+50	+56	+ 21	216
175	506	561	
175	6	1	6

Thus, cube of 56 is 175616.

(iii)

We have to find the cube of 72 using column method. We have: $a = 7$ and $b = 2$

Column I a^3	Column II $3 \times a^2 \times b$	Column III $3 \times a \times b^2$	Column IV b^3
$7^3 = 343$	$3 \times a^2 \times b = 3 \times 7^2 \times 2 = 294$	$3 \times a \times b^2 = 3 \times 7 \times 2^2 = 84$	$2^3 = 8$
+30	+8	+0	8
373	302	84	
373	2	4	8

Thus, cube of 72 is 373248.

********** END **********