$10^3 = 1000$

$19^3 = 6859$

$20^3 = 8000$

P.S-6.2

1) $x^3 + 64y^3$

Sol $x^3 + 64y^3 = x^3 + (4y)^3$

Here $a = x$, $b = 4y$

$= (x + 4y)[x^2 - 4xy + (4y)^2]$

$= (x + 4y)[x^2 - 4xy + 16y^2]$

ii) $125p^3+q^3 = (5p)^3+q^3$

Here $a=5p$, $b=q$

$= (5p+q)[(5p)^2-(5p \times q)+q^2]$

$= (5p+q)[25p^2-5pq+q^2]$

iii) $125k^3+27m^2 = (5k)^3+(3m)^2$

$a^3+b^3 = (a+b)(a^2-ab+b^2)$

Here, $a=5k$, $b=3m$

$=(5k+3m) = [(5k)^2-(5k \times 3m)+(3m)^2]$

$=(5k+3m) = [25k-15km+9m^2]$

iv) $24a^3+81b^3$

$= 3(8a^3+27b^3)$

$= 3[(2a)^3+(3b)^3]$

Here, $a=2a$, $b=3b$

$= 3(2a+3b)[(2a)^3-(2a \times 3b)+(3b)^2]$

$= 3(2a+3b)[4a^3-6ab+9b^2$

iv) $2l^3+432m^3$

$2(l^3+216m^3)$

$2[l^3+(6m)^3]$

Here $a=l$, $b=6m$

$=2[l+(6m)][(l)^2-(l \times 6m)+(6m)^2]$

$=2(l+6m)[l^2-6ml+36m^2$