

Name:

Class:

School name:

Roll number:

Section:

1) Choose the best answer from the given boxes.

- | | |
|------------------------------|-----------------------------|
| i) $2(x - 2)(x^3 + 2x + 4)$ | ii) $(a - 1)(2a^2 + a + 2)$ |
| iii) $(x - 1)(2x^2 + x + 2)$ | iv) $(x - 1)(x - 2)$ |

a) Factorize:

- i) $2a^3 - a^2 + a - 2 =$
- ii) $2x^3 - x^2 + x - 2 =$
- iii) $x^2 - 3x + 2 =$
- iv) $2x^3 - 16 =$

2) Choose the best answer:

- | | |
|-----------------|---|
| 1 $\frac{1}{2}$ | 3 |
| 2 | 2 |

$$4^x - 6 \cdot 2^{x+1} + 32 = 0$$

$$2^{x+1} - 2^x - 8 =$$

$$2^y + 2^{y-2} = 5 =$$

$$3^{2x+1} = 9^{2x-1} =$$

3) Write down the formula of:

a) $(a - b)^3$

i) $(a+b)(a^2 - ab + b^2)$

ii) $(a - b)(a^2 + ab + b^2)$

b) $a^4 + a^2b^2 + b^4$

i) $(a^2 + ab + b^2)(a^2 - ab + b^2)$

ii) $(a^2 - ab + b^2)(a^2 + ab + b^2)$