



INDIAN SCHOOL DARSAIT

DEPARTMENT OF MATHEMATICS



Subject : Mathematics Topic : Factorisation(3) Date of Worksheet : _____

Resource Person: Mrs Priya Bijukumar Date : _____

Name of the Student : _____ Class & Division : VIII Roll Number : ____

| SECTION-A | | Marks |
|-----------|--|-------|
| 1 | Write down the terms of the expression $-15x^3y + \frac{3}{5}x^2yz - 5xyz + \frac{1}{1}$ | |
| 2 | Add: (a) $3x + 15y$, $-7x + 5y - 6$ and $-7y + 2x - 11$ (b) $-x^2 - xy - y^2$, $4y^2 + 2x^2 - 3xy$ and $7xy$ | |
| 3 | Write down the terms of the expression $-15x^3y + \frac{3}{5}x^2yz - 5xyz + \frac{1}{1}$ | |
| 4 | Find out the terms containing x and write the coefficient of x in the expression $16y^2 - 3xy + 6x + 11$ | |
| 5 | Group the like terms together from the following. (a) Cab^2 , a^2bc , b^2ac , c^2ab , ab^2c , abc , acb^2 (b) Xy^2 , $-x^2y$, $2y^2x$, $3yx^2$ | |
| SECTION-B | | |
| 1. | Factorise the following: (i) $20a^3 - 25a^2b$ (ii) $10p^2qr + 12p^2q^2r - 16p^2qr^3$ | 2 |
| 2. | Factorise the following algebraic expressions using regrouping: (i) $5xy - y^2 + 10xz - 2yz$ (ii) $pa^2 + qb^2 + pb^2 + qa^2$ | 2 |
| 3. | Factorise using identities: (i) $x^2 + 16x + 64$ (ii) $1 - 6x + 9x^2$ (iii) $25a^2 - 40a + 16$ | 2 |
| 4. | Factorise using identities: (i) $100 - 49a^2$ (ii) $x^3 - 64x$ (iii) $36x^2y^2 - 25$ | 3 |
| 5. | Factorise using identities: (i) $x^2 - 8x - 33$ (ii) $x^2 + 25x - 54$ (iii) $p^2 - 11p - 102$ (iv) $x^2 + 9x + 20$ | 3 |





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| 6. | Divide the following algebraic expressions: (i) $35x^6y^4$ by $7x^2y^2$ (ii) $7x - 35$ by 7 | 2 |
| *SECTION -C*(Hot questions) | | |
| 1 | Factorize the following: a) $p^2+5pq-36q^2$ b) $a^4 - b^4$ d) $x^6 - 64$ | |
| 2 | Factorize: a). $4a^2+ b^2+ 4ab + 8a + 4b+4$ b). $p^2+ pq+ \frac{q^2}{4} + p+\frac{q}{2}$ | |