

Subject: Maths

Class:8

Topic: Ch.7 Factorisation

EXERCISE 7.1

Use Cordova Smart Class Software on the smart board in class to do Exercise.

Factorise :

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|---|------------------------------|------------------------------------|----------------|
| 1. $12x^2 - 9x$ | 2. $10xy^2 - 15x^2y$ | 3. $6xy - 9yz$ | 4. $9y^2 + 6y$ |
| 5. $-3x^2 + 3xy - 4xz$ | 6. $x^2yz + xy^2z + xyz^2$ | 7. $14a^2 - 28a^2b^2 + 21a^4$ | |
| 8. $12a^3b^2 + 18ab^4 - 6a^2b^3$ | 9. $8(x - 3y)^2 + 4(x - 3y)$ | 10. $3x(a - 3b) - y(a - 3b)$ | |
| 11. $ab^2 + ab + b + 1$ | 12. $x^3 + y^3 + xy(x + y)$ | 13. $3xy - y^2 + 6xz - 2yz$ | |
| 14. $ab(x^2 + y^2) + xy(a^2 + b^2)$ | 15. $a^2 - a(x + 3b) + 3bx$ | 16. $(a - b) + (a - b)^2$ | |
| 17. $(x + y)(3a - b) - (2x - 3y)(3a - b)$ | | 18. $4a(5a - 6b) - 12a^2(5a - 6b)$ | |

EXERCISE 7.2

Use Cordova Smart Class Software on the smart board in class to do Exercise.

Factorise each of the following (1 to 21) :

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|--|-------------------------------|-----------------------------|
| 1. $9a^2 - 16b^2$ | 2. $3x^2 - 12$ | 3. $(a + b)^2 - (a - b)^2$ |
| 4. $(2x + 3y)^2 - 9z^2$ | 5. $9x^2 - \frac{1}{144}$ | 6. $3x^5 - 243x$ |
| 7. $16(x + y)^2 - 25(x - 3y)^2$ | 8. $81 - p^4$ | 9. $x^4 - 16y^4$ |
| 10. $x^{12}y^4 - x^4y^{12}$ | 11. $16a^2 - \frac{25}{9a^2}$ | 12. $(x + 2)^2 - (x + 4)^2$ |
| 13. $(a - b)^2 - (x - y)^2$ | 14. $x^8 - 1$ | 15. $x^5 - 81x^3$ |
| 16. $\frac{1}{9}x^2y^2 - \frac{1}{16}y^2z^2$ | 17. $125a^2 - 45b^2$ | 18. $4 - 16(a - b)^2$ |
| 19. $9a^2 - 4b^2 - 3a - 2b$ | 20. $x^2 - 3x + 3y - y^2$ | 21. $a(a + c) - b(b + c)$ |
| 22. Evaluate : | (i) $(205)^2 - (195)^2$ | (ii) $(7.6)^2 - (2.4)^2$ |

