

(14)

Chapter 14 - Factorisation

1) factorise : $12a^2b + 15ab^2$

2) factorise : $10x^2 - 18x^3 + 14x^4$

3) factorise : $6xy - 4y + 6 - 9x$

4) factorise : $x^2 + 8x + 16$

5) factorise : $4y^2 - 12y + 9$

6) factorise : $49p^2 - 36$

7) factorise : $a^2 - 2ab + b^2 - c^2$

8) factorise : $m^4 - 256$

9) factorise : $x^2 + 5x + 6$

10) factorise : $y^2 - 7y + 12$

11) obtain the factors of $x^2 + 4x - 12$

12) find the factors of $3m^2 + 9m + 6$

13) Divide the following (i) $-20x^4 \div 10x^2$ (ii) $7x^2y^2z^2 \div 14xyz$

14) Divide : $24(x^2yz + xy^2z + xyz^2)$ by $8xyz$

15) Divide : $44(x^4 - 5x^3 - 24x^2)$ by $11x(x - 8)$

16) Divide : $z(5z^2 - 80)$ by $5z(z + 4)$

17) Divide : $4ab(b^2+6b-16)$ by $28a(b+8)$

18) Factorise : $4x^2 - 3xy - 16x + 12y$

19) Factorise : (a) $(5-x)^2 - 49x^2$ (b) $x^2 - x - 72$

20) Factorise and divide : $\frac{y(5y^2-8)(4y^2+16y+16)}{2(5y^2+20y)(y+2)}$

21) Factorise : $x^2 - xy + 4x - 4y$

22) Factorise : (a) $2y - 32y^5$ (b) $25a^2 + c^2 + 10ac$

23) Factorise : (a) $(10y-25) \div (2y-5)$

(b) $4yz(x^2+6x-16) \div 28y(z+8)$