EduSahara™ Assignment

Name : H.C.F and L.C.M of Polynomials

Chapter : Simplification of Algebraic Fractions

Grade : ICSE Grade VIII

1. Find the H.C.F. of $44x$ and $12x^3$

   (i) $4x^3$ (ii) $4x^2$ (iii) $132x^3$ (iv) $4x^4$ (v) $4x$

2. Find the H.C.F. of $152x^2y^2$ and $40xy^3$

   (i) $8x^2y^2$ (ii) $8xy^4$ (iii) $8xy^2$ (iv) $8x^4y^2$ (v) $760x^2y^3$

3. Find the H.C.F. of $30xy^3z^2$ and $50x^3y^2z$

   (i) $10x^2y^2z$ (ii) $150x^3y^3z^2$ (iii) $10xy^4z$ (iv) $10xy^2z$ (v) $10xy^2z^3$

4. Find the L.C.M. of $6x^3$ and $48x^2$

   (i) $48x^5$ (ii) $288x^5$ (iii) $6x^2$ (iv) $48x^4$ (v) $48x^3$

5. Find the L.C.M. of $6x^2y$ and $54xy^2$

   (i) $54x^2y^2$ (ii) $54x^2y^4$ (iii) $324x^3y^3$ (iv) $6xy$ (v) $54x^3y^2$

6. Find the L.C.M. of $6x^2y^2z^3$ and $48x^3y^3z^2$

   (i) $288x^5y^5z^5$ (ii) $48x^3y^5z^3$ (iii) $48x^3y^3z^3$ (iv) $6x^2y^2z^2$ (v) $48x^4y^3z^3$

7. Find the H.C.F. of (x^2-2x-3) and (x^2-6x-7)

   (i) $(x+1)$ (ii) $(x-3)$ (iii) $(x-7)$ (iv) $(2x+1)$ (v) $(2x-3)$

8. Find the L.C.M. of $(x^2+9x+20)$, $(x^2-3x-28)$ and $(x^2-2x-35)$

   (i) $(x+5)(x+4)(x+8)$ (ii) $(x+5)(x+4)(x+6)$ (iii) $(x+4)(x-7)(x+6)$ (iv) $(x+5)(x-7)(x+6)$

   (v) $(x+5)(x+4)(x-7)$

9. Find the L.C.M. of $(12x^2+44xy+7y^2)$ and $(18x^2+65xy+7y^2)$

   (i) $(9x+y)(6x+y)(2x+2y)$ (ii) $(6x+y)(2x+7y)(2x+2y)$ (iii) $(2x+7y)(9x+y)(2x+2y)$

   (iv) $(6x+y)(2x+7y)(2x+5y)$ (v) $(6x+y)(2x+7y)(9x+y)$

10. Which of the following gives the L.C.M. of two or more polynomials?

    (i) (L.C.M. of numerical coefficients) × (Each common factor raised to the highest power)

    (ii) (Product of numerical coefficients) × (Each common factor raised to the highest power)

    (iii) (Product of numerical coefficients) × (Each common factor raised to the lowest power)

    (iv) (L.C.M. of numerical coefficients) × (Each common factor raised to the lowest power)

11. Which of the following gives the H.C.F of two or more polynomials?

(i) (H.C.F. of numerical coefficients) × (Each common factor raised to the lowest power)

(ii) (Product of numerical coefficients) × (Each common factor raised to the highest power)

(iii) (H.C.F. of numerical coefficients) × (Each common factor raised to the highest power)

(iv) (Product of numerical coefficients) × (Each common factor raised to the lowest power)

Assignment Key

1) (v)	2) (iii)	3) (iv)	4) (v)	5) (i)	6) (iii)
7) (i)	8) (v)	9) (v)	10) (i)	11) (i)	