

RS Aggarwal Solutions Class 9 Maths Chapter 3: RS Aggarwal Solutions Class 9 Maths Chapter 3 - Factorisation of Polynomials provide a detailed guide for students to understand the concept of factorisation in polynomials.

This chapter covers various methods and techniques used to factorise polynomials, such as common factor, grouping, difference of squares, and factorisation of quadratic expressions.

With step-by-step explanations and detailed solutions, students can easily grasp the concepts and improve their problem-solving skills. By using RS Aggarwal Solutions for Chapter 3, students can build a strong foundation in algebra and enhance their overall mathematical proficiency.

RS Aggarwal Solutions Class 9 Maths Chapter 3 - Factorisation of Polynomials PDF

You can access the PDF of RS Aggarwal Solutions Class 9 Maths Chapter 3 - Factorisation of Polynomials through the provided link below. This PDF contains detailed solutions to all the exercises in the chapter, making it easier for you to understand and practice factorisation of polynomials. Whether you're studying for exams or simply want to reinforce your understanding of the concepts, this PDF will be a valuable resource.

RS Aggarwal Solutions Class 9 Maths Chapter 3 - Factorisation of Polynomials PDF

RS Aggarwal Solutions Class 9 Maths Chapter 3 - Factorisation of Polynomials

The solutions for RS Aggarwal Class 9 Maths Chapter 3 - Factorisation of Polynomials are provided below. These solutions provide a detailed guide for students to understand the concepts and techniques of polynomial factorisation effectively.

By referring to these solutions, students can strengthen their problem-solving skills and gain confidence in tackling polynomial factorisation problems. These solutions serve as a valuable resource for self-assessment and exam preparation, helping students achieve academic success in mathematics.

Page No 99:

Question 1:

Answer:

We have:

$$9x^2 + 12xy = 3x(3x + 4y)$$

Page No 99:

Question 2:

We have:

$$9x^2 + 12xy = 3x(3x + 4y)$$

Answer:

We have:

$$18x^2y - 24xyz = 6xy(3y - 4z)$$

Page No 99:

Question 3:

We have:

$$18x^2y - 24xyz = 6xy(3y - 4z)$$

Answer:

We have:

$$27a^3b^3 - 45a^4b^2 = 9a^3b^2(3b - 5a)$$

Page No 99:

Question 4:

We have:

$$27a^3b^3 - 45a^4b^2 = 9a^3b^2(3b - 5a)$$

Answer:

We have:

$$2ax + y - 3bx + y = x + y(2a - 3b)$$

Page No 99:

Question 5:

We have:

$$2ax + y - 3bx + y = x + y(2a - 3b)$$

Answer:

We have:

$$2xp^2 + q^2 + 4yp^2 + q^2 = 2xp^2 + q^2 + 2yp^2 + q^2 = 2p^2 + q^2x + 2y$$

Page No 99:

Question 6:

We have:

$$2xp^2 + q^2 + 4yp^2 + q^2 = 2xp^2 + q^2 + 2yp^2 + q^2 = 2p^2 + q^2x + 2y$$

Answer:

We have:

$$\begin{aligned} xa - 5 + y5 - a &= xa - 5 - ya - 5 \\ &= a - 5x - y \end{aligned}$$

Page No 99:

Question 7:

We have:

$$\begin{aligned} xa - 5 + y5 - a &= xa - 5 - ya - 5 \\ &= a - 5x - y \end{aligned}$$

Answer:

We have:

$$\begin{aligned} 4a + b - 6a + b^2 &= 2a + b2 - 3a + b \\ &= 2a + b2 - 3a - 3b \end{aligned}$$

Page No 99:

Question 8:

We have:

$$\begin{aligned} 4a + b - 6a + b^2 &= 2a + b2 - 3a + b \\ &= 2a + b2 - 3a - 3b \end{aligned}$$

Answer:

We have:

$$\begin{aligned} 83a - 2b^2 - 103a - 2b &= 23a - 2b43a - 2b - 5 \\ &= 23a - 2b12a - 8b - 5 \end{aligned}$$

Page No 99:

Question 9:

We have:

$$\begin{aligned} 83a - 2b^2 - 103a - 2b &= 23a - 2b43a - 2b - 5 \\ &= 23a - 2b12a - 8b - 5 \end{aligned}$$

Answer:

We have:

$$\begin{aligned} xx + y^3 - 3x^2yx + y &= xx + yx + y^2 - 3xy \\ &= xx + yx^2 + y^2 + 2xy - 3xy = xx + yx^2 + y^2 - xy \end{aligned}$$

Question 10:

We have:

$$\begin{aligned} xx + y^3 - 3x^2yx + y &= xx + yx + y^2 - 3xy \\ &= xx + yx^2 + y^2 + 2xy - 3xy = xx + yx^2 + y^2 - xy \end{aligned}$$

Answer:

We have:

$$\begin{aligned} x^3 + 2x^2 + 5x + 10 &= x^3 + 2x^2 + 5x + 10 \\ &= x^2x + 2 + 5x + 2 = x + 2x^2 + 5 \end{aligned}$$

Page No 99:

Question 11:

We have:

$$\begin{aligned} x^3 + 2x^2 + 5x + 10 &= x^3 + 2x^2 + 5x + 10 \\ &= x^2x + 2 + 5x + 2 = x + 2x^2 + 5 \end{aligned}$$

Answer:

We have:

$$x^2 + xy - 2xz - 2yz = x^2 + xy - 2xz + 2yz = xx + y - 2zx + y = x + yx - 2z$$

Question 12:

We have:

$$x^2 + xy - 2xz - 2yz = x^2 + xy - 2xz + 2yz = xx + y - 2zx + y = x + yx - 2z$$

Answer:

We have:

$$a^3b - a^2b + 5ab - 5b = ba^3 - a^2 + 5a - 5$$

$$= ba^2a - 1 + 5a - 1 = ba - 1a^2 + 5$$

Page No 99:**Question 13:**

We have:

$$a^3b - a^2b + 5ab - 5b = ba^3 - a^2 + 5a - 5$$

$$= ba^2a - 1 + 5a - 1 = ba - 1a^2 + 5$$

Answer:

We have:

$$8 - 4a - 2a^3 + a^4 = 8 - 4a - 2a^3 - a^4 = 42 - a - a^3 2 - a = 2 - a 4 - a^3$$

Question 14:

We have:

$$8 - 4a - 2a^3 + a^4 = 8 - 4a - 2a^3 - a^4 = 42 - a - a^3 2 - a = 2 - a 4 - a^3$$

Answer:

We have:

$$x^3 - 2x^2y + 3xy^2 - 6y^3 = x^3 - 2x^2y + 3xy^2 - 6y^3 = x^2x - 2y + 3y^2x - 2y = x - 2yx^2 + 3y^2$$

Page No 99:**Question 15:**

We have:

$$x^3 - 2x^2y + 3xy^2 - 6y^3 = x^3 - 2x^2y + 3xy^2 - 6y^3 = x^2x - 2y + 3y^2x - 2y = x - 2yx^2 + 3y^2$$

Answer:

We have:

$$px - 5q + pq - 5x = px - 5x + pq - 5q = xp - 5 + qp - 5 = p - 5x + q$$

Question 16:

We have:

$$px - 5q + pq - 5x = px - 5x + pq - 5q = xp - 5 + qp - 5 = p - 5x + q$$

Answer:

We have:

$$x^2 + y - xy - x = x^2 - xy - x - y = xx - y - 1x - y = x - yx - 1$$

Page No 99:**Question 17:**

We have:

$$x^2 + y - xy - x = x^2 - xy - x - y = xx - y - 1x - y = x - yx - 1$$

Answer:

We have:

$$3a - 1^2 - 6a + 2 = 3a - 1^2 - 23a - 1 = 3a - 13a - 1 - 2 = 3a - 13a - 3 = 33a - 1a - 1$$

Question 18:

We have:

$$3a - 1^2 - 6a + 2 = 3a - 1^2 - 23a - 1$$

$$= 3a - 13a - 1 - 2 = 3a - 13a - 1 - 2 = 3a - 13a - 3 = 33a - 1a - 1$$

Answer:

We have:

$$2x - 3^2 - 8x + 12 = 2x - 3^2 - 42x - 3$$

$$= 2x - 32x - 3 - 4 = 2x - 32x - 3 - 4 = 2x - 32x - 7$$

Page No 99:**Question 19:**

We have:

$$2x - 3^2 - 8x + 12 = 2x - 3^2 - 42x - 3$$

$$= 2x - 32x - 3 - 4 = 2x - 32x - 3 - 4 = 2x - 32x - 7$$

Answer:

We have:

$$a^3 + a - 3a^2 - 3 = a^3 - 3a^2 + a - 3$$

$$= a^2a - 3 + 1a - 3 = a - 3a^2 + 1$$

Question 20:

We have:

$$a^3 + a - 3a^2 - 3 = a^3 - 3a^2 + a - 3$$

$$= a^2a - 3 + 1a - 3 = a - 3a^2 + 1$$

Answer:

We have:

$$3ax - 6ay - 8by + 4bx = 3ax - 6ay + 4bx - 8by$$

$$= 3ax - 2y + 4bx - 2y = x - 2y3a + 4b$$

Page No 99:**Question 21:**

We have:

$$3ax - 6ay - 8by + 4bx = 3ax - 6ay + 4bx - 8by$$

$$= 3ax - 2y + 4bx - 2y = x - 2y3a + 4b$$

Answer:

We have:

$$abx^2 + a^2x + b^2x + ab = abx^2 + b^2x + a^2x + ab$$

$$= b x a x + b + a a x + b = a x + b b x + a$$

Question 22:

We have:

$$abx^2 + a^2x + b^2x + ab = abx^2 + b^2x + a^2x + ab$$

$$= b x a x + b + a a x + b = a x + b b x + a$$

Answer:

We have:

$$x^3 - x^2 + ax + x - a - 1 = x^3 - x^2 + ax - a + x - 1$$

$$= x^2x - 1 + ax - 1 + 1x - 1 = x - 1x^2 + a + 1$$

Page No 100:**Question 23:**

We have:

$$x^3 - x^2 + ax + x - a - 1 = x^3 - x^2 + ax - a + x - 1$$

$$= x^2x - 1 + ax - 1 + 1x - 1 = x - 1x^2 + a + 1$$

Answer:

We have:

$$2x + 4y - 8xy - 1 = 2x - 8xy - 1 - 4y$$

$$= 2x1 - 4y - 11 - 4y = 1 - 4y2x - 1$$

Question 24:

We have:

$$2x + 4y - 8xy - 1 = 2x - 8xy - 1 - 4y$$

$$= 2x1 - 4y - 11 - 4y = 1 - 4y2x - 1$$

Answer:

We have:

$$abx^2 + y^2 - xya^2 + b^2 = abx^2 + aby^2 - a^2xy - b^2xy$$

$$= abx^2 - a^2xy - b^2xy - aby^2 = axbx - ay - bybx - ay = bx - ayax - by$$

Page No 100:

Question 25:

We have:

$$abx^2 + y^2 - xya^2 + b^2 = abx^2 + aby^2 - a^2xy - b^2xy$$

$$= abx^2 - a^2xy - b^2xy - aby^2 = axbx - ay - bybx - ay = bx - ayax - by$$

Answer:

We have:

$$a^2 + abb + 1 + b^3 = a^2 + ab^2 + ab + b^3$$

$$= a^2 + ab^2 + ab + b^3 = aa + b^2 + ba + b^2 = a + b^2a + b$$

Question 26:

We have:

$$a^2 + abb + 1 + b^3 = a^2 + ab^2 + ab + b^3$$

$$= a^2 + ab^2 + ab + b^3 = aa + b^2 + ba + b^2 = a + b^2a + b$$

Answer:

We have:

$$a^3 + ab1 - 2a - 2b^2 = a^3 + ab - 2a^2b - 2b^2$$

$$= a^3 - 2a^2b + ab - 2b^2 = a^2a - 2b + ba - 2b = a - 2ba^2 + b$$

Page No 100:

Question 27:

We have:

$$a^3 + ab1 - 2a - 2b^2 = a^3 + ab - 2a^2b - 2b^2$$

$$= a^3 - 2a^2b + ab - 2b^2 = a^2a - 2b + ba - 2b = a - 2ba^2 + b$$

Question 28:

We have:

$$2a^2 + bc - 2ab - ac = 2a^2 - 2ab - ac - bc$$

$$= 2aa - b - ca - b = a - b2a - c$$

Answer:

We have:

$$ax + by^2 + bx - ay^2 = ax^2 + 2 \times ax \times by + by^2 + bx^2 - 2 \times bx \times ay + ay^2$$

$$= a^2x^2 + 2abxy + b^2y^2 + b^2x^2 - 2abxy + a^2y^2 = a^2x^2 + b^2y^2 + b^2x^2 + a^2y^2 = a^2x^2 + b^2x^2 + a^2y^2 + b^2y^2 = x^2a^2 + b^2 + y^2a^2 + b^2 = a^2 + b^2x^2 + y^2$$

Page No 100:

Question 29:

We have:

$$ax + by^2 + bx - ay^2 = ax^2 + 2 \times ax \times by + by^2 + bx^2 - 2 \times bx \times ay + ay^2$$

$$= a^2x^2 + 2abxy + b^2y^2 + b^2x^2 - 2abxy + a^2y^2 = a^2x^2 + b^2y^2 + b^2x^2 + a^2y^2 = a^2x^2 + b^2x^2 + a^2y^2 + b^2y^2 = x^2a^2 + b^2 + y^2a^2 + b^2 = a^2 + b^2x^2 + y^2$$

Answer:

We have:

$$aa + b - c - bc = a^2 + ab - ac - bc$$

$$= a^2 - ac + ab - bc = aa - c + ba - c = a - ca + b$$

Question 30:

We have:

$$aa + b - c - bc = a^2 + ab - ac - bc \\ = a^2 - ac + ab - bc = aa - c + ba - c = a - ca + b$$

Answer:

We have:

$$aa - 2b - c + 2bc = a^2 - 2ab - ac + 2bc \\ = a^2 - 2ab - ac - 2bc = aa - 2b - ca - 2b = a - 2ba - c$$

Page No 100:**Question 31:**

We have:

$$aa - 2b - c + 2bc = a^2 - 2ab - ac + 2bc \\ = a^2 - 2ab - ac - 2bc = aa - 2b - ca - 2b = a - 2ba - c$$

Answer:

We have:

$$a^2x^2 + ax^2 + 1x + a = ax^2 + 1x + a^2x^2 + a \\ = xax^2 + 1 + aax^2 + 1 = ax^2 + 1x + a$$

Question 32:

We have:

$$a^2x^2 + ax^2 + 1x + a = ax^2 + 1x + a^2x^2 + a \\ = xax^2 + 1 + aax^2 + 1 = ax^2 + 1x + a$$

Answer:

We have:

$$abx^2 + 1 + xa^2 + b^2 = abx^2 + ab + a^2x + b^2x \\ = abx^2 + a^2x + b^2x + ab = axbx + a + bbx + a = bx + aax + b$$

Page No 100:**Question 33:**

We have:

$$abx^2 + 1 + xa^2 + b^2 = abx^2 + ab + a^2x + b^2x \\ = abx^2 + a^2x + b^2x + ab = axbx + a + bbx + a = bx + aax + b$$

Answer:

We have:

$$x^2 - a + bx + ab = x^2 - ax - bx + ab \\ = x^2 - ax - bx - ab = xx - a - bx - a = x - ax - b$$

Question 34:

We have:

$$x^2 - a + bx + ab = x^2 - ax - bx + ab \\ = x^2 - ax - bx - ab = xx - a - bx - a = x - ax - b$$

Answer:

$$\text{We have: } x^2 + \frac{1}{x^2} \cdot 2 \cdot 3x + \frac{3}{x} = x^2 \cdot 2 + \frac{1}{x^2} \cdot 3x + \frac{3}{x} = x^2 \cdot 2 \times x \times \frac{1}{x} + \frac{1^2}{x} - 3x \cdot \frac{1}{x} = x \cdot \frac{1^2}{x} - 3x \cdot \frac{1}{x} = x - \frac{1}{x}x - \frac{1}{x} \cdot 3$$

Benefits of RS Aggarwal Solutions Class 9 Maths Chapter 3 Factorisation of Polynomials

The RS Aggarwal Solutions for Class 9 Maths Chapter 3 - Factorisation of Polynomials offer several benefits to students:

Comprehensive Coverage: The solutions cover all the exercises in Chapter 3, providing a thorough understanding of factorisation of polynomials.

Step-by-Step Approach: Each solution is presented in a step-by-step manner, making it easy for students to follow and grasp the concepts involved in factorisation.

Clarity of Concepts: The solutions help clarify concepts related to factorisation of polynomials, ensuring that students have a strong foundation in this topic.

Practice Opportunity: By solving the exercises using the provided solutions, students can practice and reinforce their understanding of factorisation, thereby improving their problem-solving skills.

Exam Preparation: These solutions serve as a valuable resource for exam preparation, helping students to revise and test their knowledge of factorisation before exams.