RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3: RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 provide a detailed and comprehensive guide to solving factorization problems.

The solutions are prepared to clarify the process of factoring algebraic expressions covering a range of problems that enhance students problem-solving skills. By working through these solutions, students can gain a deeper understanding of factorization, improve their ability to tackle challenging problems and build a strong foundation in algebraic methods.

CBSE Compartment Result 2024

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 Overview

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 focuses on advanced factorization techniques, presenting students with a variety of challenging problems designed to enhance their algebraic skills. This exercise involves factoring complex algebraic expressions using methods such as grouping and applying algebraic identities.

Students work on simplifying expressions by breaking them down into simpler factors through techniques like grouping terms and using identities such as the difference of squares or perfect square trinomials.

The solutions provide detailed, step-by-step explanations for each problem, guiding students through the process and helping them understand how to effectively apply these factorization methods. Completing this exercise helps students develop a deeper understanding of factorization, improve their problem-solving skills and build a strong foundation for more advanced algebraic concepts.

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 PDF

The PDF link for RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 is available below. This PDF provides a detailed guide to the exercise providing step-by-step solutions to help students tackle complex factorization problems.

By accessing this PDF students can view comprehensive explanations and solutions that break down each problem into manageable steps enhancing their understanding of advanced factorization techniques. To download and view the solutions, click the link provided below:

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 PDF

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 (Exercise 7C)

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3 are available below. This resource provide detailed solutions and explanations for problems related to operations on algebraic expressions.

Factorise:

FORMULA:

(i) $a^2 + 2ab + b^2 = (a + b)^2$

(ii) $a^2 – 2ab + b^2 = (a – b)^2$

(Question 1) $x^2 + 8x + 16$

$= (x)^2 + (2 \times x \times 4) + (4)^2$

$= (x + 4)^2$

(Question 2) $x^2 + 14x + 49$

$= (x)^2 + (2 \times x \times 7) + (7)^2$

$= (x + 7)^2$

(Question 3) $1 + 2x + x^2$

$= (1)^2 + (2 \times 1 \times x) + (x)^2$

$= (1 + x)^2$

(Question 4) $9 + 6z + z^2$

$= (3)^2 + (2 \times 3 \times z) + (z)^2$

$= (3 + z)^2$

(Question 5) $x^2 + 6ax + 9a^2$

$= (x)^2 + (2 \times x \times 3a) + (3a)^2$

$= (x + 3a)^2$

(Question 6) $4y^2 + 20y + 25$

$= (2y)^2 + (2 \times 2y \times 5) + (5)^2$

$= (2y + 5)^2$

(Question 7) $36a^2 + 36a + 9$

$= (6a)^2 + (2 \times 6a \times 3) + (3)^2$

$= (6a + 3)^2$

(Question 8) $9m^2 + 24m + 16$

$= (3m)^2 + (2 \times 3m \times 4) + (4)^2$

$= (3m + 4)^2$

(9) $z^2 + z + \frac{1}{4}$

$$= (z)^2 + \left(2 \times z \times \frac{1}{2}\right) + \left(\frac{1}{2}\right)^2$$

$$= \left(z + \frac{1}{2}\right)^2$$

(Question 10) $49a^2 + 84ab + 36b^2$

$= (7a)^2 + (2 \times 7a + 6b) + (6b)^2$

$= (7a + 6b)^2$

(Question 11) $p^2 – 10p + 25$

$= (p)^2 – (2 \times p \times 5) + (5)^2$

$= (p – 5)^2$

(Question 12) $121a^2 – 88ab + 16b^2$

$= (11a)^2 – (2 \times 11a \times 4b) + (4b)^2$

$= (11a – 4b)^2$

(Question 13) $1 – 6x + 9x^2$

$= (1)^2 – (2 \times 1 \times 3x) + (3x)^2$

$= (1 – 3x)^2$

(Question 14) $9y^2 – 12y + 4$

$= (3y)^2 – (2 \times 3y \times 2) + (2)^2$

$= (3y – 2)^2$

(Question 15) $16x^2 – 24x + 9$

$= (4x)^2 – (2 \times 4x \times 3) + (3)^2$

$= (4x – 3)^2$

(Question 16) $m^2 – 4mn + 4n^2$

$= (m)^2 – (2 \times m \times 2n) + (2n)^2$

$= (m – 2n)^2$

(Question 17) $a^2b^2 – 6abc + 9c^2$

$= (ab)^2 – (2 \times ab \times 3c) + (3c)^2$

$= (ab – 3c)^2$

(Question 18) $m^4 + 2m^2n^2 + n^4$

$= (m^2)^2 + (2 \times m^2 \times n^2) + (n^2)^2$

$= (m^2 + n^2)^2$

(Question 19) $(l + m)^2 – 4lm$

$= l^2 + 2lm + m^2 – 4lm$

$= l^2 – 2lm + m^2$

$= (l – m)^2$

Benefits of RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.3

- **In-Depth Understanding**: The solutions provide detailed explanations of complex factorization problems helping students understand advanced factorization techniques and methods.
- **Enhanced Problem-Solving Skills**: By working through the exercise students develop and refine their problem-solving abilities which is important for tackling more challenging algebraic expressions.
- **Preparation for Advanced Topics**: Mastery of these factorization techniques builds a strong foundation for understanding more advanced algebraic concepts in future studies.
- **Increased Confidence**: With clear and thorough explanations, students gain confidence in their ability to solve complex factorization problems and apply their knowledge effectively.