RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2: Here we provide you with detailed RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2. Our Physics Wallah subject experts have prepared these solutions as per the latest syllabus prescribed for Class 8 Maths.

RS Aggarwal's solutions are considered very useful for Class 8 Maths exam preparation. For better and more strategic preparation in the correct direction, our article will act as a pathfinder for the students preparing for the Class 8 Maths Exam 2024.

RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 Overview

RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 are prepared by subject experts from Physics Wallah to provide a clear understanding of exponents.

In mathematics, exponents represent repeated multiplication of a number. These solutions cover the essential concepts and rules of exponents, helping students grasp the topic thoroughly.

By using these solutions, students can enhance their mathematical skills, deepen their understanding of exponents and perform better in their exams. The solutions are designed to guide students in solving problems accurately and efficiently making their exam preparation more effective.

RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 PDF

The PDF link for RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 is available below. This PDF is an invaluable resource for students aiming to strengthen their understanding and improve their performance in exams.

By following these detailed solutions students can develop a strong foundation in mathematics and confidently tackle various types of exponent-related questions.

RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 PDF

RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exponent (Exercise 2b) Exercise 2.2

Here we have provided RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 to help students in their exam preparation. These solutions provide detailed explanations and

step-by-step guidance on problems related to exponentsenabling students to thoroughly understand the concepts.

By using these solutions, students can practice effectively, clarify their doubts, and improve their understanding of exponents, which will be beneficial for achieving better results in their exams.

Question 1: Write each of the following numbers in standard form:

(i) 57.36 = 5.736 × 10

(ii) 3500000 = 3.5×10^6

(iii) 273000 = 2.73×10^5

(iv) 168000000 = 1.68×10^8

(v) 4630000000000 = 4.63×10^{12}

(vi) $345 \times 10^5 = 3.45 \times 10^7$

Solution:

(i) 57.36 = 5.736 × 10^1

- 57.36 can be written as 5.736 × 10.

(ii) 3500000 = 3.5 × 10^6

- 3500000 can be written as 3.5 × 10^6.

(iii) 273000 = 2.73 × 10^5

- 273000 can be written as 2.73 × 10^5.

(iv) 168000000 = 1.68 × 10^8

- 168000000 can be written as 1.68 × 10^8.

(v) 4630000000000 = 4.63 × 10^12

- 4630000000000 can be written as 4.63 × 10^12.

(vi) 345 × 10^5 = 3.45 × 10^7

- 345 × 10^5 can be written as 3.45 × 10^7.

Question 2: Write each of the following numbers in usual from:

Solution:

(i) 3.74×10^5

$= \frac{374}{100} \times 10^5$

$= \frac{374 \times 10^5}{10^2} = 374 \times 10^{5-2}$

$= 374 \times 10^3 = 374 \times 1000 = 374000$

(ii) 6.912×10^8

$= \frac{6912}{1000} \times 10^8$

$= \frac{6912}{10^3} \times 10^8 = 6912 \times 10^{8-3}$

$= 6912 \times 10^5 = 6912 \times 100000$

$= 691200000$

(iii) 4.1253×10^7

$= \frac{41253}{10000} \times 10^7 = \frac{41253}{10^4} \times 10^7$

$= 41253 \times 10^{7-4} = 41253 \times 10^3$

$= 41253 \times 1000 = 41253000$

(iv) 2.5×10^4

$= \frac{25}{10} \times 10^4 = 25 \times 10^{4-1}$

$= 25 \times 10^3 = 25 \times 1000$

$= 25000$

(v) 5.17×10^6

$= \frac{517}{100} \times 10^6$

$= \frac{517}{10^2} \times 10^6 = 517 \times 10^{6-2}$

$= 517 \times 10^4 = 517 \times 10000$

$= 5170000$

(vi) 1.679×10^9

$= \frac{1679}{1000} \times 10^9 = \frac{1679}{10^3} \times 10^9$

$= 1679 \times 10^{9-3} = 1679 \times 10^6$

$= 1679 \times 1000000$

$= 1679000000$

Question 3: (i) The height of Mount Everest is 8848 m. write it in standard form.

Solution: The height of Mount Everest = 8848 m

= (8.848 × 1000) m = (8.848 × 10^3) m.

(ii) The speed of light is 300000000 m/sec. Express it in standard form.

Solution: The speed of light = 300000000 m/sec

= (3 × 100000000) m/sec = (3 × 10^8) m/sec

(iii) The distance from the earth to the sun is 149600000000 m. Write it in standard form.

Solution: The distance between earth and sun = 149600000000 m

= (1.496 × 100000000000) m = (1.496 × 10^{11}) m

Question 4: Mass of earth is (5.97 × 10^{24}) kg and mass of moon is (7.35 × 10^{22}) kg. What is the total mass of the two?

Solution: The total mass = {(5.97 × 10^2 × 10^{22}) + (7.35 × 10^{22})} kg

= {(597 + 7.35) × 10^{22}}kg = 604.35 × 10^{22} kg

Question 5: Write each of the following numbers in standard form:

Solution:

$$\text{(i) } 0.0006 = \frac{6}{10^4} = 6 \times 10^{-4}$$

$$\text{(ii) } 0.00000083 = \frac{83}{10^8} = \frac{8.3\times10}{10^8} = 8.3 \times 10^{-7}$$

$$\text{(iii) } 0.0000000534 = \frac{534}{10^{10}} = \frac{5.34\times10^2}{10^{10}} = 5.34 \times 10^{-8}$$

$$\text{(iv) } 0.0027 = \frac{27}{10^4} = \frac{2.7\times10}{10^4} = 2.7 \times 10^{-3}$$

$$\text{(v) } 0.00000165 = \frac{165}{10^8} = \frac{1.65\times10^2}{10^8} = 1.65 \times 10^{-6}$$

$$\text{(vi) } 0.00000000689 = \frac{689}{10^{11}} = \frac{6.89\times10^2}{10^{11}} = 6.89 \times 10^{-9}$$

(6) (i) 1 micron = $\frac{1}{1000000}$ m. Express it in standard form.

$= \frac{1}{1000000} = 1 \times 10^{-6}\, m$

(ii) Size of a bacteria = 0.0000004 m. Express it in standard form.

$= \frac{4}{10000000} = 4 \times 10^{-7}$ m

(iii) Thickness of a paper = 0.03 mm. Express it in standard form.

$= \frac{3}{100} = 3 \times 10^{-2}$ mm

Question 7: Write each of the following numbers in usual form:

Solution:

(i) $2.06 \times 10^{-5} = \frac{206}{100} \times \frac{1}{10^5} = \frac{206}{10^{2+5}} = 206 \times 10^7 = 0.0000206$

(ii) $5 \times 10^{-7} = \frac{5}{10^7} = 0.0000005$

(iii) $6.82 \times 10^{-6} = \frac{682}{100} \times \frac{1}{10^6} = \frac{682}{10^{2+6}} = \frac{682}{10^8} = 0.00000682$

(iv) $5.673 \times 10^{-4} = \frac{5673}{1000} \times \frac{1}{10^4} = \frac{5673}{10^{3+4}} = \frac{5673}{10^7} = 0.0005673$

(v) $1.8 \times 10^{-2} = \frac{18}{10} \times \frac{1}{10^2} = \frac{18}{10^{1+2}} = \frac{18}{10^3} = 0.018$

(vi) $4.129 \times 10^{-3} = \frac{4129}{1000} \times \frac{1}{10^3} = \frac{4129}{10^{3+3}} = \frac{4129}{10^6} = 0.004129$

Benefits of RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2

- **Helps with Exam Preparation**: RS Aggarwal Solutions for Class 8 Maths Chapter 2 Exercise 2.2 help students plan their studies better. By following these solutions students can make a study timetable that gives more time to the topics they find difficult. This way, they can practice all the questions and be well-prepared for their exams.
- **Understand Your Preparation Level**: These solutions help students see how well they are prepared. By working through the problems they can find out which areas they need to work on more. This helps them focus on their weak spots and improve.
- **Check Your Performance**: Using RS Aggarwal Solutions lets students check their performance. They can see what mistakes they are making and learn how to avoid them. This way, they can be more confident during the actual exam and know where they need to improve.
- **Manage Your Time Better**: Good time management is important for exams. These solutions help students learn how to solve questions quickly and efficiently. By practicing they can learn to finish easy questions fast and save time for the harder ones, making sure they complete the exam on time.
- **Improve Accuracy and Speed**: Regular practice with these solutions helps students get better at solving questions correctly and quickly. The more they practice the better they understand the concepts and can solve problems faster. This is important for doing well in exams.