

Mathematics (Class VII)

Learning Outcomes	Sources/Resources	Week-wise Suggestive Activities (to be guided by Parents with the help of teachers)
<p>The learner multiplies /divides two integers. interprets the division and multiplication of fractions uses algorithms to multiply and divide fractions /decimals.</p>	<p>NCERT /State <i>Mathematics</i> textbook for Class VII</p> <p>Chapter 1: INTEGERS</p> <p>Chapter 2: FRACTIONS AND DECIMALS</p> <p>E-resources: Integers https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5b583b8a16b51c01cccebeb0</p> <p>https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5d42d0d116b51c0171d33ad5</p> <p>https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5d42cea016b51c0171d33ab0</p> <p>https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5b583c6616b51c01cdff01fd</p> <p>https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/58dd3a87472d4a03227bf998</p> <p>Fractions and decimals https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5850f8494</p>	<p>WEEK 1</p> <ul style="list-style-type: none"> The first chapter is about Integers in which multiplication and division of integers is dealt. Discussion may be initiated about integers which students have already studied in Class VI. The learners may be sent some questions about integers and may be asked to respond online. Different ways of introducing multiplication of integers may be discussed (On the number line, through patterns, etc.) Students may be encouraged to form examples and look for patterns. Teachers and other learners may give their comments. This may continue in Week 2 as well. <p>WEEK 2</p> <ul style="list-style-type: none"> Learners may be introduced to properties of multiplication of integers. They may observe the patterns and send their observations to the teacher. Generalisation of the property may then be discussed. Exercises from the textbook of <i>Mathematics</i> for Class VII and <i>Exemplar Problem Book</i> for Class VII may be attempted. Learners should send their solutions to the teacher and teacher and other learners may discuss about them. Teacher may select appropriate activities from <i>Laboratory Manual for Elementary Stage</i> (Activities 29, 38) in mathematics and ask the learners to perform them and send their observations. Conclusions about the concept can then be drawn after discussion. Concept of division of integers can then be discussed on similar lines.

	<p>72d4a9b25a086cc (video in Hindi)</p> <p>https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5850f8b7472d4a9b25a0875c (video in Hindi)</p> <p>https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/57d9044f16b51c0312a1ef63 (Video in Hindi)</p>	<p>WEEK 3</p> <ul style="list-style-type: none"> • On similar lines as done in earlier weeks concept of multiplication of fractions can be taken up. • E resources can be used for better visualisation and understanding of concepts. • While getting comments from learners, teachers may assess understanding of learners about the concepts and plan for an appropriate feedback. • In all the activities learners may be encouraged to draw their inferences and try to justify them through examples. <p>WEEK 4</p> <ul style="list-style-type: none"> • Concept of division of fractions can then be discussed using activities in the textbook and laboratory manual in mathematics at Elementary stage • The activities and their online sharing can continue in Week 4. • Laboratory Manual for Elementary stage (Activities 35,36,37,39,40) • Learners may be involved in a game which goes as follows: <ul style="list-style-type: none"> ➤ <i>Think of a number</i> ➤ <i>Add 7 to it</i> ➤ <i>Multiply the result obtained by 2</i> ➤ <i>Subtract 4</i> ➤ <i>Find half of the result obtained</i> ➤ <i>Subtract original number.</i> ➤ <i>Learners may tell the number obtained</i> ➤ <i>Discuss the game by changing its rules and try to find how all of them get the same answer under given conditions.</i> • More such games can be played, but at the end of the game an attempt should be made to discuss about the relation between the conditions of the game and the result obtained. It may lead to understanding of some relation between numbers. The games can be modified for integers/fractions.
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