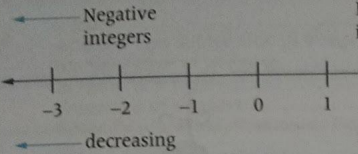


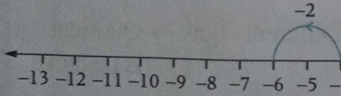
Teachers Name: S.B. Meher

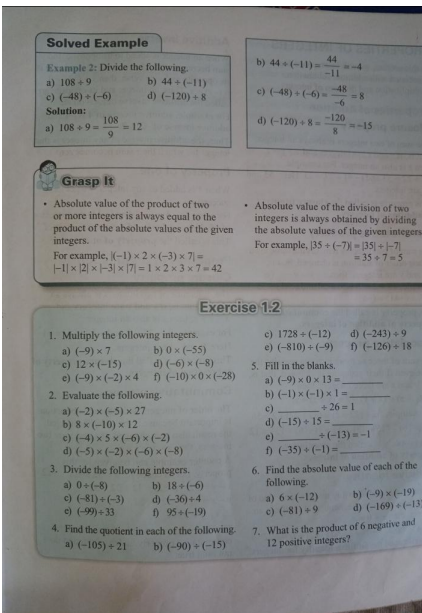
Sub: Maths

Class: 7th(Rose)

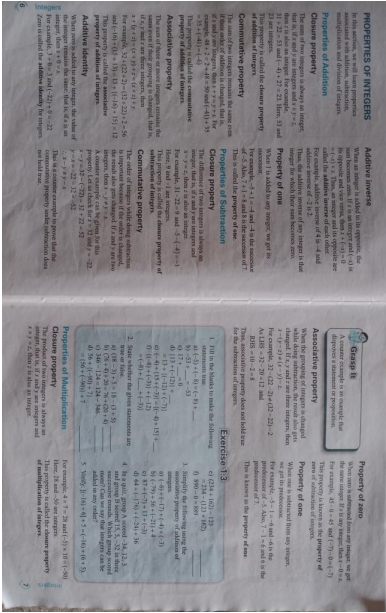
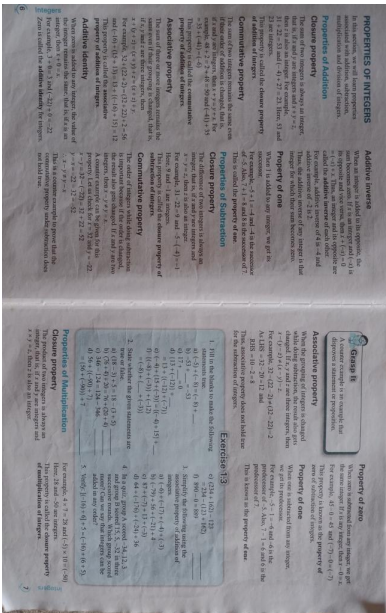
S. N.	Date	Lesson Name and Topic	CW Pages	Home Work
01	02-04-2025	Class not taken due to craft event.	No class	No HW given
02	03-04-2025	Class not taken due to sports event.	No class	No HW given

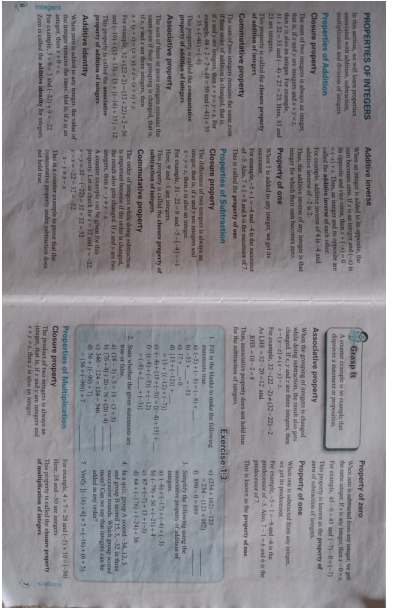
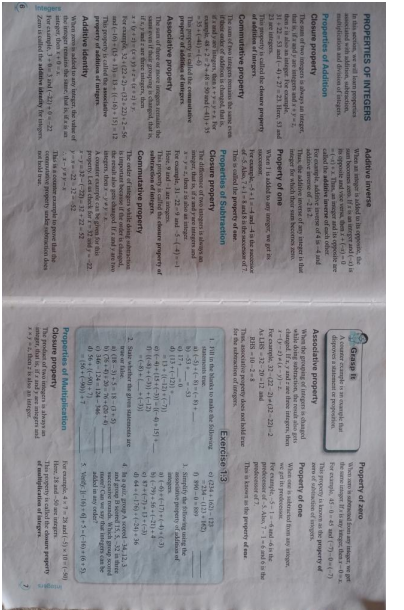
03	04-04-2025	Lesson-1 Integers	Integers on Number Line Consider the given number line and its characteristics of integers.  Fig. 1.1 1. The distance between two consecutive integers always remains the same. This distance is referred to as one unit. 2. The numbers to the left of zero on a number line are negative and numbers to the right are positive. 3. Zero is neither a positive nor a negative integer. Ordering and Comparison of Integers Like whole numbers, integers can be compared or arranged in any order. Integers follow the same order as whole numbers by their representation on the number line (Fig. 1.1). An integer is greater than the integers on its left and smaller than the integers on its right. For example, $2 > 1$, $-1 > -2$, $5 > 0$ and so on. From Fig. 1.1, we can conclude the following: 1. Every positive integer is greater than every negative integer. 2. Zero is smaller than every positive integer and greater than every negative integer. 3. The farther a number is from zero, the greater its value. 4. The farther a number is from zero, the smaller its value.	1- What is called Integers? 2- Find the absolute value of -3 and 8.
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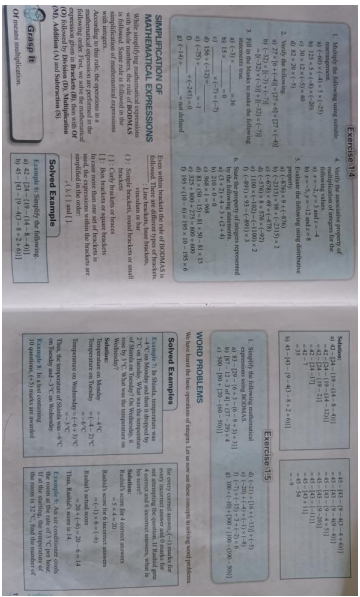
04	05-04-2025	Lesson-1 Integers	2. When we add two or more integers of different signs, we subtract the smaller absolute value from the larger absolute value. The sign of the result is the sign of the integer having the greater absolute value. For example, $5 + (-4) = 1 \text{ and } -5 + 4 = -1$ 1. Arrange the following integers in ascending order. a) $-8, 11, 14, 0, -7, -12$ b) $11, -11, -8, -13, 0$ 2. Simplify and find the value of the following. a) $-(-3)$ b) -12 c) $-16 + 5$ d) -10 3. Fill in the blanks using the appropriate sign. a) Additive inverse of -15 is $-15 - (-3)$. MULTIPLICATION OF INTEGERS We know that multiplication is repeated addition. For example, $5 \times 2 = 5 + 5 = 10$ $3 \times 4 = 3 + 3 + 3 + 3 = 12$ Let us now extend our learning to multiplication of integers. For example, $3 \times (-2) = (-2) + (-2) + (-2) = -6$ $4 \times (-3) = (-3) + (-3) + (-3) + (-3) = -12$ We can also do these multiplications using a number line.  Fig. 1.2	Ex- 1.1 No.2 (d) No.4 (c) (d)
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05	07-04-2025	Lesson-1 Integers	 Solved Example Example 2: Divide the following. a) $108 \div 9$ b) $44 \div (-11)$ c) $(-48) \div (-6)$ d) $(-120) \div 8$ Solution: a) $108 \div 9 = \frac{108}{9} = 12$ b) $44 \div (-11) = \frac{44}{-11} = -4$ c) $(-48) \div (-6) = \frac{-48}{-6} = 8$ d) $(-120) \div 8 = \frac{-120}{8} = -15$ Grasp It - Absolute value of the product of two or more integers is always equal to the product of the absolute values of the given integers. For example, $(-1) \times 2 \times (-3) \times 7 = 42$ $-1 \times 2 \times -3 \times 7 = 1 \times 2 \times 3 \times 7 = 42$ - Absolute value of the division of two integers is always obtained by dividing the absolute values of the given integers. For example, $(35 \div (-7)) = (35 \div 7) = 5$ $35 \div -7 = 35 \div 7 = 5$ Exercise 1.2 - Multiply the following integers. a) $(-9) \times 7$ b) $0 \times (-55)$ c) $1728 \div (-12)$ d) $(-243) \div 9$ e) $(-810) \div (-9)$ f) $(-126) \div 18$ - Evaluate the following. a) $(-2) \times (-5) \times 27$ b) $8 \times (-10) \times 12$ c) $(-4) \times 5 \times (-6) \times (-2)$ d) $(-5) \times (-2) \times (-6) \times (-8)$ - Divide the following integers. a) $0 \div (-8)$ b) $18 \div (-6)$ c) $(-81) \div (-3)$ d) $(-36) \div 4$ e) $(-99) \div 33$ f) $95 \div (-19)$ - Find the quotient in each of the following. a) $(-105) \div 21$ b) $(-90) \div (-15)$ - Fill in the blanks. a) $(-9) \times 0 \times 13 = \underline{\hspace{2cm}}$ b) $(-1) \times (-1) \times 1 = \underline{\hspace{2cm}}$ c) $\underline{\hspace{2cm}} \div 26 = 1$ d) $(-15) \div 15 = \underline{\hspace{2cm}}$ e) $\underline{\hspace{2cm}} \div (-13) = -1$ f) $(-35) \div (-1) = \underline{\hspace{2cm}}$ - Find the absolute value of each of the following. a) $6 \times (-12)$ b) $(-9) \times (-19)$ c) $(-81) \div 9$ d) $(-169) \div (-13)$ - What is the product of 6 negative and 12 positive integers?	Ex- 1.2 No.2 (c)(d) No.3 (c) (d) No.6 (b)
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06	08-04-2025	Lesson-1 Integers (Activity- Understanding Banking System, Credit, Debit)	   Ex- 1.2 No.2 (c)(d) No.3 (c) (d) No.6 (b)
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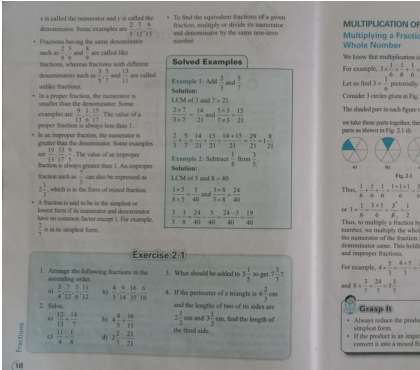
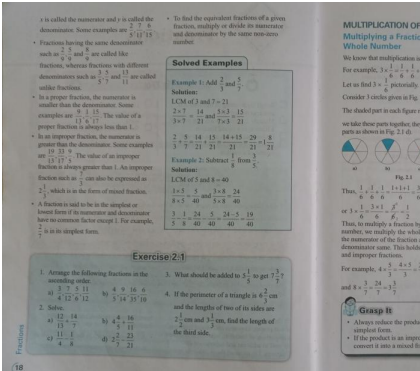
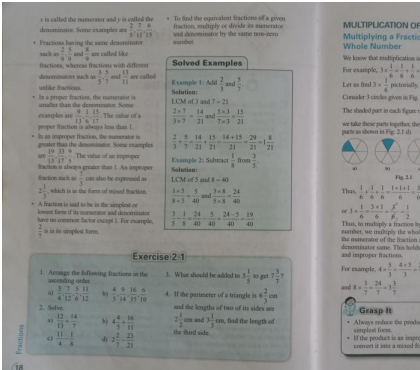
07	09-04-2025	Class not taken due to music event.	No class	Ex- 1.2 No.2 (c)(d) No.3 (c) (d) No.6 (b)
08	11-04-2025	Lesson-1 Integers		Solve the following No.1 $(-4) + [15 + (-3)]$ No.2 $[(-16) + 6] + 5$ No.3 $12 + 10 + (-3) + (-11) + 12$
09	12-04-2025	Lesson-1 Integers		Solve the following by using distributive property a) $3 \times (12 + 4)$ b) $(-4) \times 7 - (-4) \times 8$

10	15-04-2025	Lesson-1 Integers		Exercise 1.3 No.5 all no. Exercise 1.4 No.4 (c) (d)
11	16-04-2025	Lesson-1 Integers		Exercise 1.4 No.2 (b) No.4 (b) No.5 (c) (e)

12	17-04-2025	Lesson-1 Integers		Exercise 1.5 No.1 (b) and (c)
13	19-04-2025	Lesson-1 Integers (Class not taken due to sport events)	No Class	Exercise 1.5 No.1 (b) and (c)

14	21-04-2025	Lesson-1 Integers	Solution: a) $42 - [24 - \{19 - (14 - 8)\}]$ $= 42 - [24 - \{19 - (14 - 8)\}]$ $= 42 - [24 - \{19 - 2\}]$ $= 42 - [24 - 17]$ $= 42 - 7$ $= 35$ b) $45 - [43 - \{9 - 4(3 - 8 \div 2)\}]$ 1. Simplify the following expressions using BODMAS a) $83 - [29 - \{6 \div 3 - (4 - 1)\}]$ b) $[87 - 12 \div 3 \text{ of } 4] + 15$ c) $500 - [80 + \{20 - (30 - 10)\}]$ WORD PROBLEMS We have learnt the basic operations on integers. Let us solve some word problems. Solved Examples Example 7: In Shimla, temperature was -4°C on Monday and then it rose by 2°C on Tuesday. What was the temperature of Shimla on Tuesday? On Wednesday, the temperature rose by 3°C. What was the temperature on Wednesday? Solution: Temperature on Monday $= -4^{\circ}\text{C}$ Temperature on Tuesday $= -4^{\circ}\text{C} + 2^{\circ}\text{C} = -2^{\circ}\text{C}$ Temperature on Wednesday $= -2^{\circ}\text{C} + 3^{\circ}\text{C} = 1^{\circ}\text{C}$ Thus, the temperature of Shimla on Tuesday was -2°C and on Wednesday it was 1°C. Example 8: In a test containing 10 questions, (+5) marks are given for a correct answer and (-2) marks are given for a wrong answer. If a student gets 4 correct answers and 6 wrong answers, what is his score?	Exercise 1.5 No. 1 (f) Workout No 8 (c)
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15	22-04-2025	Lesson-1 Integers	hours it takes to bring down the room temperature to 5°C. Solution: Total temperature to be brought down = Final temperature – Initial temperature = $(5 - 32)^{\circ}\text{C} = -27^{\circ}\text{C}$ Rate of cooling = -3°C per hour. Number of hours required to bring down the room temperature = $-27 \div (-3) = 9$. Thus, 9 hours are required to bring down the room temperature to 5°C. Exercise 1.6 - A submarine was situated 600 feet below sea level. If it ascends 250 feet, what is its new position? - The temperature of a particular place at noon on a winter day was 5°C. At midnight, the temperature had dropped by 12°C. What was the temperature at midnight? - The sum of two integers is -250. If one integer is 120, find the other. - In a competitive examination, $(+4)$ marks are given for every correct answer, (-2) marks are given for every incorrect answer and 0 marks for not attempting the question. - Ruchi scored 20 marks. If she has got 12 correct answers, how many questions has she attempted incorrectly? - Rohit scored (-6) marks in this test, though he has got 7 correct answers. How many questions has he attempted incorrectly? - Anil deposited ₹5,000 in his bank account on one day and withdrew ₹2,400 on the second day. On the third day, he again deposited ₹1,800. What was his balance at the end of the third day? - The product of two negative integers is 420. If one integer is (-5), find the other. - An elevator descends into a mine shaft at the rate of 6 m/min. If it begins to descend from 20 m above the ground, what will be its position after 45 minutes? Wrap Up - Integers are the collection of whole numbers and the negatives of natural numbers. - The numerical value of an integer, irrespective of the sign, is called its absolute value. - The sum of two negative integers is also a negative integer. - When we add a positive and a negative integer, the sign of the result is the sign of the integer having the greater absolute value. - The product of a positive integer and a negative integer is a negative integer. - The product of two negative integers or two positive integers is a positive integer. - The quotient of two positive integers or two negative integers is a positive integer. - The quotient of a positive and a negative integer is a negative integer.	Exercise1.6 No.4 (b) No.6
16	23-04-2025	Lesson-1 Integers	hours it takes to bring down the room temperature to 5°C. Solution: Total temperature to be brought down = Final temperature – Initial temperature = $(5 - 32)^{\circ}\text{C} = -27^{\circ}\text{C}$ Rate of cooling = -3°C per hour. Number of hours required to bring down the room temperature = $-27 \div (-3) = 9$. Thus, 9 hours are required to bring down the room temperature to 5°C. Exercise 1.6 - A submarine was situated 600 feet below sea level. If it ascends 250 feet, what is its new position? - The temperature of a particular place at noon on a winter day was 5°C. At midnight, the temperature had dropped by 12°C. What was the temperature at midnight? - The sum of two integers is -250. If one integer is 120, find the other. - In a competitive examination, $(+4)$ marks are given for every correct answer, (-2) marks are given for every incorrect answer and 0 marks for not attempting the question. - Ruchi scored 20 marks. If she has got 12 correct answers, how many questions has she attempted incorrectly? - Rohit scored (-6) marks in this test, though he has got 7 correct answers. How many questions has he attempted incorrectly? - Anil deposited ₹5,000 in his bank account on one day and withdrew ₹2,400 on the second day. On the third day, he again deposited ₹1,800. What was his balance at the end of the third day? - The product of two negative integers is 420. If one integer is (-5), find the other. - An elevator descends into a mine shaft at the rate of 6 m/min. If it begins to descend from 20 m above the ground, what will be its position after 45 minutes? Wrap Up - Integers are the collection of whole numbers and the negatives of natural numbers. - The numerical value of an integer, irrespective of the sign, is called its absolute value. - The sum of two negative integers is also a negative integer. - When we add a positive and a negative integer, the sign of the result is the sign of the integer having the greater absolute value. - The product of a positive integer and a negative integer is a negative integer. - The product of two negative integers or two positive integers is a positive integer. - The quotient of two positive integers or two negative integers is a positive integer. - The quotient of a positive and a negative integer is a negative integer.	Workout No.1 No.4
17	24-04-2025	Lesson-1 Integers	hours it takes to bring down the room temperature to 5°C. Solution: Total temperature to be brought down = Final temperature – Initial temperature = $(5 - 32)^{\circ}\text{C} = -27^{\circ}\text{C}$ Rate of cooling = -3°C per hour. Number of hours required to bring down the room temperature = $-27 \div (-3) = 9$. Thus, 9 hours are required to bring down the room temperature to 5°C. Exercise 1.6 - A submarine was situated 600 feet below sea level. If it ascends 250 feet, what is its new position? - The temperature of a particular place at noon on a winter day was 5°C. At midnight, the temperature had dropped by 12°C. What was the temperature at midnight? - The sum of two integers is -250. If one integer is 120, find the other. - In a competitive examination, $(+4)$ marks are given for every correct answer, (-2) marks are given for every incorrect answer and 0 marks for not attempting the question. - Ruchi scored 20 marks. If she has got 12 correct answers, how many questions has she attempted incorrectly? - Rohit scored (-6) marks in this test, though he has got 7 correct answers. How many questions has he attempted incorrectly? - Anil deposited ₹5,000 in his bank account on one day and withdrew ₹2,400 on the second day. On the third day, he again deposited ₹1,800. What was his balance at the end of the third day? - The product of two negative integers is 420. If one integer is (-5), find the other. - An elevator descends into a mine shaft at the rate of 6 m/min. If it begins to descend from 20 m above the ground, what will be its position after 45 minutes? Wrap Up - Integers are the collection of whole numbers and the negatives of natural numbers. - The numerical value of an integer, irrespective of the sign, is called its absolute value. - The sum of two negative integers is also a negative integer. - When we add a positive and a negative integer, the sign of the result is the sign of the integer having the greater absolute value. - The product of a positive integer and a negative integer is a negative integer. - The product of two negative integers or two positive integers is a positive integer. - The quotient of two positive integers or two negative integers is a positive integer. - The quotient of a positive and a negative integer is a negative integer.	Summer Holiday HW.

18	18-06-2025	Lesson-2 Fractions		Solve the following 1) $2/7 + 3/7$ 2) $1/2 + 2/4 + 3/5$
19	20-06-2025	Lesson-2 Fractions		Exercise 2.1 No.1 (b) No.2 (b)
20	23-06-2025	Lesson-2 Fractions		Solve the following (a) $1/2 + 2/3 + 3/4$ (b) $21/5 - 10/20$

21

24-06-2025

Lesson-2 Fractions

Exercise 2.2 No.1 (d) (e) No.2 (c) (d)

$$\begin{aligned} \text{b) } \frac{5}{8} \times 2\frac{3}{4} &= \frac{5}{8} \times \frac{11}{4} = \frac{5 \times 11}{8 \times 4} \\ &= \frac{55}{32} = 1\frac{23}{32} \end{aligned}$$

$$\begin{aligned} \text{c) } 2\frac{8}{9} \times 2\frac{1}{13} &= \frac{26}{9} \times \frac{27}{13} \\ &= \frac{26^2 \times 27^3}{9 \times 13} \end{aligned}$$

Value of the Products

We know that when two whole numbers are multiplied, the value of the product is greater than each of the two numbers multiplied. Let us check whether this is true for fractions or not.

- Product of two proper fractions

Let us find the product of

$$\frac{2}{5} \times \frac{3}{7} = \frac{6}{35}; \text{ On comparison}$$

$$\frac{6}{35} < \frac{2}{5} \text{ and } \frac{6}{35} < \frac{3}{7}, \text{ that is, the product is}$$

less than each of the given fractions. This is true in general.

1. Find the product in its simplest form.

$$\text{a) } 3 \times \frac{7}{54} \quad \text{b) } 2 \times \frac{5}{9}$$

$$\text{d) } \frac{13}{4} \times \frac{7}{52} \quad \text{e) } \frac{13}{56} \times \frac{7}{13}$$

2. Find.

$$\text{a) } \frac{1}{2} \text{ of } 34 \quad \text{b) } \frac{2}{3} \text{ of } 45$$

22

25-06-2025

Lesson-2 Fractions

Exercise 2.2 No.3 (d) (e) No.6

$$\begin{aligned} \text{b) } \frac{5}{8} \times 2\frac{3}{4} &= \frac{5}{8} \times \frac{11}{4} = \frac{5 \times 11}{8 \times 4} \\ &= \frac{55}{32} = 1\frac{23}{32} \end{aligned}$$

$$\begin{aligned} \text{c) } 2\frac{8}{9} \times 2\frac{1}{13} &= \frac{26}{9} \times \frac{27}{13} \\ &= \frac{26 \times 27}{9 \times 13} \end{aligned}$$

Value of the Products

We know that when two whole numbers are multiplied, the value of the product is greater than each of the two numbers multiplied. Let us check whether this is true for fractions or not.

- Product of two proper fractions

Let us find the product of

$$\frac{2}{5} \times \frac{3}{7} = \frac{6}{35}; \text{ On comparison}$$

$$\frac{6}{35} < \frac{2}{5} \text{ and } \frac{6}{35} < \frac{3}{7}, \text{ that}$$

the product is less than each of the given fractions. This is true in general.

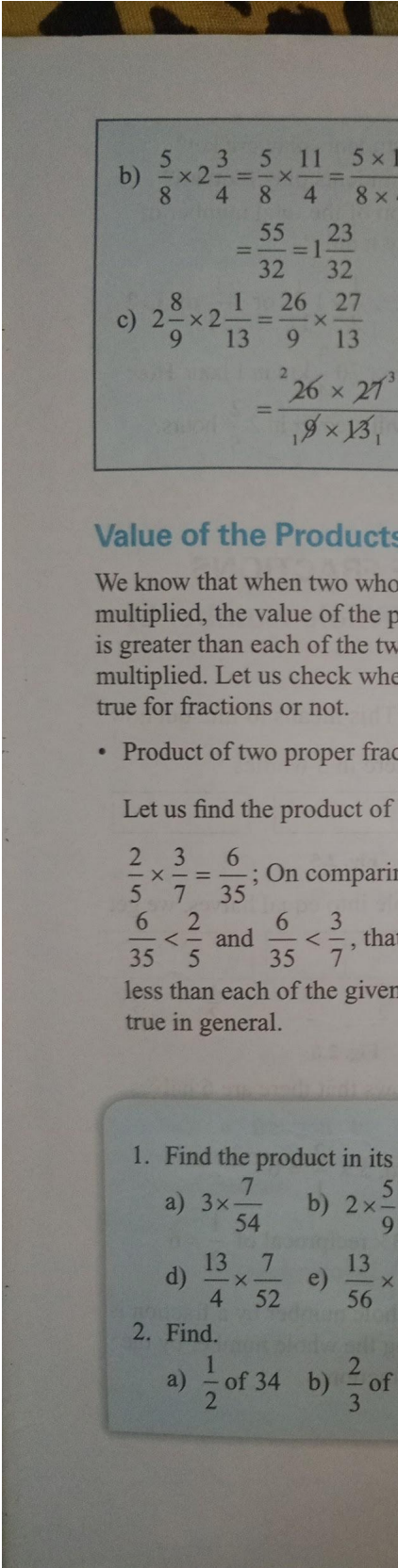
1. Find the product in its simplest form.

$$\text{a) } 3 \times \frac{7}{54} \quad \text{b) } 2 \times \frac{5}{9}$$

$$\text{d) } \frac{13}{4} \times \frac{7}{52} \quad \text{e) } \frac{13}{56} \times \frac{7}{13}$$

2. Find.

$$\text{a) } \frac{1}{2} \text{ of } 34 \quad \text{b) } \frac{2}{3} \text{ of } 45$$

23	26-06-2025	Lesson-2 Fractions	 Handwritten problems: $\text{b) } \frac{5}{8} \times 2\frac{3}{4} = \frac{5}{8} \times \frac{11}{4} = \frac{5 \times 11}{8 \times 4}$ $= \frac{55}{32} = 1\frac{23}{32}$ $\text{c) } 2\frac{8}{9} \times 2\frac{1}{13} = \frac{26}{9} \times \frac{27}{13}$ $= \frac{26 \times 27}{9 \times 13}$ Printed worksheet snippet: Value of the Products We know that when two whole numbers are multiplied, the value of the product is greater than each of the two numbers multiplied. Let us check whether this is true for fractions or not. Product of two proper fractions Let us find the product of $\frac{2}{5} \times \frac{3}{7} = \frac{6}{35}; \text{ On comparison } \frac{6}{35} < \frac{2}{5} \text{ and } \frac{6}{35} < \frac{3}{7}, \text{ that is, the product is less than each of the given fractions. This is true in general.}$ 1. Find the product in its simplest form. a) $3 \times \frac{7}{54}$ b) $2 \times \frac{5}{9}$ d) $\frac{13}{4} \times \frac{7}{52}$ e) $\frac{13}{56} \times \frac{7}{13}$ 2. Find. a) $\frac{1}{2}$ of 34 b) $\frac{2}{3}$ of 45	Solve the following 1) $2/5 + 3/5 \times 1/5$ 2) $3/10 + 5/2 \times 2/5$
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[illegible]

