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Atomic Energy Education Society,Mumbai

## Class :VII

Worksheet No.-1

## Subject:- Mathematics

Name of the chapter :- Fractions and Decimals.

| 1 | Section $\mathbf{A}$ |  |  |
| :--- | :--- | :--- | :--- |
|  | Which of the drawingshow $2 \times \frac{1}{2}$ |  |  |


| 6 | Reciprocal of $\frac{7}{9}$ is <br> a) $\frac{7}{9}$ <br> b) $\frac{9}{7}$ <br> c) $\frac{1}{63}$ <br> d) 63 | $\left[\begin{array}{l}\text { Which of the drawingshow3 } \times \frac{1}{4}\end{array}\right.$ |
| :--- | :--- | :--- | :--- |
| 7 | a) |  |


|  | $\frac{1}{2}$ of 36 boxes is |  |
| :---: | :---: | :---: |
| 15 | Fill in the blanks: $4.7 \div 10=$ | [1] |
| 16 | Fill in the blanks: $8.4 \div$ $\qquad$ $=2.1$. | [1] |
| 17 | Assertion (A): $\frac{2}{3}$ of 8 is the same as $=\left(\frac{2}{3}\right) \times 8$. <br> Reason (R): $\left(\frac{2}{3}\right) \times 8=\frac{1}{12}$. <br> a) Both A and R are true and R is the correct explanation of A . <br> b) Both $A$ and $R$ are true but $R$ is not the correct explanation of $A$. <br> c) $A$ is true but $R$ is false. <br> d) $A$ is false but $R$ is true. | [1] |
| 18 | Assertion (A): $\frac{3}{7}$ is obtained when we divide a whole into seven equal parts and take three parts. <br> Reason ( $\mathbf{R}$ ): A fraction is a number representing part of a whole. <br> a) Both $A$ and $R$ are true and $R$ is the correct explanation of $A$. <br> b) Both $A$ and $R$ are true but $R$ is not the correct explanation of $A$. <br> c) $A$ is true but $R$ is false. <br> d) $A$ is false but $R$ is true. | [1] |
| 19 | Assertion (A): The value of product of two proper fractions is always less than each of the fraction. <br> Reason (R): $\frac{4}{7} \times \frac{3}{7}=\frac{12}{49}$. <br> a) Both A and R are true and R is the correct explanation of A . <br> b) Both A and R are true but R is not the correct explanation of A . <br> c) $A$ is true but $R$ is false. <br> d) $A$ is false but $R$ is true. | [1] |
| 20 | $\begin{aligned} & \text { Assertion (A): } 12 \text { is } \frac{3}{4} \text { of } 24 . \\ & \text { Reason (R): } \frac{3}{4} \times 24=12 . \end{aligned}$ <br> a) Both A and R are true and R is the correct explanation of A . <br> b) Both $A$ and $R$ are true but $R$ is not the correct explanation of $A$. <br> c) $A$ is true but $R$ is false. <br> d) $A$ is false but $R$ is true. | [1] |
|  | Section C |  |
| 21 | Multiply and express as a mixed fraction: $4 \times 6 \frac{1}{3}$ | [2] |
| 22 | Which is greater: $\frac{1}{2}$ of $\frac{6}{7}$ or $\frac{2}{3}$ of $\frac{3}{7}$ | [2] |
| 23 | Multiply and express as a mixed fraction: $3 \times 5 \frac{1}{5}$ | [2] |
| 24 | Find $\frac{2}{3}$ of 6 using circles with shaded parts. | [2] |
| 25 | Find: $0.3 \div 100$ | [2] |
| 26 | Renu completed $\frac{2}{3}$ part of her home work in 2 hours. How much part of her home work had she completed in $1 \frac{1}{4}$ hours? | [2] |


| 27 | Cost of a burger is₹ $20 \frac{3}{4}$ and of Macpuff is ₹ $15 \frac{1}{2}$. Find the cost of 4 burgers and 14 macpuffs. | [2] |
| :---: | :---: | :---: |
| 28 | How many $\frac{1}{16} \mathrm{~kg}$ boxes of chocolates can be made with $1 \frac{1}{2} \mathrm{~kg}$ chocolates? | [2] |
| 29 | Find: 432.6 $\div 100$ | [2] |
| 30 | A picture hall has seats for 820 persons. At a recent film show, one usher guessed it was $\frac{3}{4}$ full, another that it was $\frac{2}{3}$ full. The ticket office reported 648 sales. Which usher (first or second) made the better guess? | [2] |
|  | Section D |  |
| 31 | Vidya and Pratap went for a picnic. Their mother gave them a water bottle that contained 5 litres of water. Vidya consumed $\frac{2}{5}$ of the water. Pratap consumed the remaining water. <br> 1. How much water did Vidya drink? <br> 2. What fraction of the total quantity of water Pratap drink? | [3] |
| 32 | 1. Provide the number in the box - ,such that $\frac{2}{3} \times-=\frac{10}{30}$ <br> 2. The simplest form of the number obtained in - is $\qquad$ | [3] |
| 33 | The product of two numbers is $25 \frac{5}{6}$. If one of the numbers is $6 \frac{2}{3}$, find the other. | [3] |
| 34 | There is a $3 \times 3 \times 3$ cube which consists of twenty seven $1 \times 1 \times 1$ cubes (see Figure). It is tunneled by removing cubes from the coloured squares. Find: <br> 1. Fraction of number of small cubes removed to the number of small cubes left in given cube. <br> 2. Fraction of the number of small cubes removed to the total number of small cubes. <br> 3. What part is (ii) of (i)? | [3] |
| 35 | Find the area of a square field if its each side is $10 \frac{3}{4} \mathrm{~m}$ long. | [3] |
|  | Section E |  |
| 36 | Multiply the fractions: <br> 1. $2 \frac{1}{3}$ by $\frac{2}{5}$ <br> 2. $5 \frac{3}{4}$ by $2 \frac{3}{7}$ | [5] |
| 37 | The product of two numbers is $20 \frac{5}{7}$. If one of the numbers is $6 \frac{2}{3}$, find the other. | [5] |
| 38 | The length of a rectangular plot of area $68 \frac{3}{4}$ sq.m. is $12 \frac{1}{2} \mathrm{~m}$, find its width. | [5] |
|  | Section F |  |
| 39 | Read the text carefully and answer the questions: Sushant reads $\frac{1}{3}$ part of a book in 1 hour. Lipika reads $1 \frac{1}{2}$ part same book in 1 hour. | [5] |


|  | 1. The value of the product of two improper fractions is $\qquad$ than each of the two fractions. <br> 2. How much part of the book will Sushant read in $2 \frac{1}{5}$ hours? <br> a) $\frac{2}{15}$ <br> b) $\frac{1}{15}$ <br> c) $\frac{11}{15}$ <br> d) $\frac{1}{5}$ <br> 3. How much part of the book will Lipika read in $2 \frac{1}{5}$ hours? <br> a) $3 \frac{1}{10}$ <br> b) $3 \frac{3}{10}$ <br> c) $3 \frac{2}{10}$ <br> d) $2 \frac{1}{10}$ <br> 4. Who reads more in 1 hour and by how much? <br> a) Sushant reads more by $1 \frac{1}{6}$ <br> b) Both reads equal part <br> c) Lipika reads more by $1 \frac{1}{6}$ <br> d) None of these <br> 5. The value of the product of two proper fractions is greater than each of the two fractions. <br> (a) True <br> (b) False. |  |
| :---: | :---: | :---: |
| 40 | Read the text carefully and answer the questions: In a class of 40 students $\frac{1}{5}$ of the total number of students like to study English, $\frac{2}{5}$ of the total number like to study Mathematics | [5] |

and the remaining students like to study Science.


1. To multiply a whole number with a proper or an improper fraction, we multiply the whole number with the $\qquad$ of the fraction keeping the denominator same.
2. How many students like to study English?
a) 10
b) 8
c) 5
d) 6
3. How many students like to study Mathematics?
a) 2
b) 8
c) 4
d) 16
4. What fraction of the total number of students like to study Science?
a) $\frac{2}{5}$
b) $\frac{4}{5}$
c) $\frac{8}{5}$
d) $\frac{3}{5}$
5. To multiply a mixed fraction to a whole number, first convert the mixed fraction to an improper fraction and then multiply.
(a) True
(b) False
