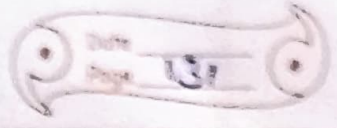


Hw  
09/11/2021



Exercise - 11(A)

1. Find the average of

5.  $2\frac{3}{5}, 3\frac{3}{10}, 3\frac{1}{2}, \frac{2}{5}, \frac{9}{10}, 1\frac{1}{2}$

$= \frac{13}{5} + \frac{33}{10} + \frac{7}{2} + \frac{2}{5} + \frac{9}{10} + \frac{3}{2}$

$= \frac{26 + 33 + 35 + 4 + 9 + 15}{10} = \frac{122}{10}$

LCM of 5, 10, 2, 5, 10, 2 = 10

Number of quantities given = 6

Average =  $\frac{122}{10} \div 6 = \frac{122}{10} \times \frac{1}{6} = \frac{61}{3} = 20\frac{1}{3}$

8.  $\frac{7}{12}, 2\frac{5}{6}, 5\frac{3}{4}, \frac{1}{2}, \frac{5}{12}, \frac{1}{6}$

$= \frac{7}{12} + \frac{17}{6} + \frac{23}{4} + \frac{1}{2} + \frac{5}{12} + \frac{1}{6}$

$= \frac{7 + 34 + 69 + 6 + 5 + 2}{12} = \frac{123}{12}$

LCM of 12, 6, 4, 2, 12, 6 = 12

Number of quantities given = 6

Average =  $\frac{123}{12} \div 6 = \frac{123}{12} \times \frac{1}{6} = \frac{41}{24} = 1\frac{17}{24}$



$$h. \quad \frac{1}{4}, \frac{3}{4}, \frac{1}{2}, \frac{1}{6}, \frac{3}{8}$$

$$= \frac{12 + 36 + 24 + 8 + 18}{48} = \frac{98}{48} \quad \text{L.C.M. of } 4, 4, 2, 6, 8 =$$

Number of quantities given = 5

$$\text{Average} = \frac{98}{48} \div 6 = \frac{98}{48} \times \frac{1}{6}$$

$$= \frac{24}{19} \times \frac{1}{6} = \frac{23}{72}$$

3. Find the average of all even numbers between 7 and 23.

Solution:

All the even numbers between 7 and 23 = 8, 10, 12, 14, 16, 18, 20, 22

Average =  $\frac{\text{Sum of all quantities}}{\text{Number of quantities}}$

$$= \frac{8 + 10 + 12 + 14 + 16 + 18 + 20 + 22}{8}$$

$$= \frac{100}{8} = \frac{250}{2} = 125$$



4. Find the average of all odd numbers between 10 and 30

Solution:

All odd numbers between 10 and 30 = 11, 13, 17, 19, 23

$$\text{Average} = \frac{\text{Sum of all quantities}}{\text{Number of quantities}}$$

$$= \frac{11 + 13 + 17 + 19 + 23}{5}$$

$$= \frac{83}{5} = 16 \frac{3}{5}$$