ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA- 700019

CLASS – IV TERM - SECOND SUBJECT- ARITHMETIC ANSWER WORKSHEET – 7 TOPIC – FRACTIONS DATE – 11.05.2020

1. Reduce the following fractions into their lowest forms:

a) $\frac{4}{20}$

Factors of 4 = **1**, **2**, **4**

Factors of 20 = **1**, **2**, **4**, 5, 10, 20

Common factors = 1, 2 and 4

H. C. F. = 4

$$\frac{4}{20} = \frac{4 \div 4}{20 \div 4} = \frac{1}{5}$$

Hence, $\mathbf{\frac{1}{5}}$ is the lowest form of $\frac{4}{20}$

b) $\frac{18}{32}$

H. C. F. of 18 and 32 is 2

$$\frac{18}{32} = \frac{18 \div 2}{32 \div 2} = \frac{9}{16}$$

Hence, $\mathbf{\frac{9}{16}}$ is the lowest form of $\frac{18}{32}$

c) $\frac{33}{77}$

H. C. F. of 33 and 77 is 11

$$\frac{33}{77} = \frac{33 \div 11}{77 \div 11} = \frac{3}{7}$$

Hence, $\mathbf{\frac{3}{7}}$ is the lowest form of $\frac{33}{77}$

d) $\frac{9}{12}$

H. C. F. of 9 and 12 is 3

$$\frac{9}{12} = \frac{9 \div 3}{12 \div 3} = \frac{3}{4}$$

Hence, $\mathbf{\frac{3}{4}}$ is the lowest form of $\frac{9}{12}$

e) $\frac{27}{45}$

H. C. F. of 27 and 45 is 9

$$\frac{27}{45} = \frac{27 \div 9}{45 \div 9} = \frac{3}{5}$$

Hence, $\mathbf{\frac{3}{5}}$ is the lowest form of $\frac{27}{45}$

2. **Add the following fractions:**

a) $\frac{4}{9} + \frac{3}{9}$

$= \frac{4+3}{9}$

$= \mathbf{\frac{7}{9}}$

Ans. $\mathbf{\frac{7}{9}}$

b) $\frac{9}{14} + \frac{3}{14}$

$= \frac{9+3}{14}$

$= \frac{12}{14}$

Ans. $\mathbf{\frac{12}{14}}$

c) $\frac{5}{13} + \frac{7}{13}$

$= \frac{5+7}{13}$

$= \frac{12}{13}$

Ans. $\mathbf{\frac{12}{13}}$

d) $\frac{7}{15} + \frac{6}{15}$

$= \frac{7+6}{15}$

$= \frac{13}{15}$

Ans. $\mathbf{\frac{13}{15}}$

e) $\frac{7}{19} + \frac{8}{19}$

$= \frac{7+8}{19}$

$= \frac{15}{19}$

Ans. $\mathbf{\frac{15}{19}}$

3. **Subtract the following fractions.**

a) $\frac{6}{12} - \frac{3}{12}$

$= \frac{6-3}{12}$

$= \frac{3}{12}$

Ans. $\mathbf{\frac{3}{12}}$

b) $\frac{9}{17} - \frac{7}{17}$

$= \frac{9-7}{17}$

$= \frac{2}{17}$

Ans. $\mathbf{\frac{2}{17}}$

c) $\frac{8}{16} - \frac{4}{16}$

$= \frac{8-4}{16}$

$= \frac{4}{16}$

Ans. $\mathbf{\frac{4}{16}}$

d) $\frac{7}{13} - \frac{2}{13}$

$= \frac{7-2}{13}$

$= \frac{5}{13}$

Ans. $\mathbf{\frac{5}{13}}$

e) $\frac{8}{20} - \frac{2}{20}$

$= \frac{8-2}{20}$

$= \frac{6}{20}$

Ans. $\mathbf{\frac{6}{20}}$

4. Add and reduce to the lowest forms:

a) $\frac{4}{18} + \frac{2}{18}$

$= \frac{4+2}{18}$

$= \frac{6}{18}$

H. C. F. of 6 and 18 is 6

$\frac{6}{18} = \frac{6 \div 6}{18 \div 6} = \frac{1}{3}$

Hence, $\mathbf{\frac{1}{3}}$ is the lowest form of $\frac{6}{18}$

b) $\frac{3}{16} + \frac{5}{16}$

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

$= \frac{8}{16}$

H. C. F. of 8 and 16 is 8

$\frac{8}{16} = \frac{8 \div 8}{16 \div 8} = \frac{1}{2}$

Hence, $\mathbf{\frac{1}{2}}$ is the lowest form of $\frac{8}{16}$

c) $\frac{8}{20} + \frac{7}{20}$

$= \frac{8+7}{20}$

$= \frac{15}{20}$

H. C. F. of 15 and 20 is 5

$\frac{15}{20} = \frac{15 \div 5}{20 \div 5} = \frac{3}{4}$

Hence, $\mathbf{\frac{3}{4}}$ is the lowest form of $\frac{15}{20}$

d) $\frac{15}{24} + \frac{7}{24}$

$= \frac{15+7}{24}$

$= \frac{22}{24}$

H. C. F. of 22 and 24 is 2

$\frac{22}{24} = \frac{22 \div 2}{24 \div 2} = \frac{11}{12}$

Hence, $\mathbf{\frac{11}{12}}$ is the lowest form of $\frac{22}{24}$

e) $\frac{11}{30} + \frac{9}{30}$

$= \frac{11+9}{30}$

$= \frac{20}{30}$

H. C. F. of 20 and 30 is 10

$\frac{20}{30} = \frac{20 \div 10}{30 \div 10} = \frac{2}{3}$

Hence, $\mathbf{\frac{2}{3}}$ is the lowest form of $\frac{20}{30}$