ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA- 700019

CLASS – IV TERM - SECOND SUBJECT- ARITHMETIC ANSWER WORKSHEET – 3 TOPIC – FRACTIONS DATE – 06.05.2020

1. **Find the missing numbers in the equivalent fractions:**

a) $\frac{3}{10} = \frac{15}{50}$ b) $\frac{5}{10} = \frac{20}{40}$ c) $\frac{5}{8} = \frac{15}{24}$

2. **Complete the equivalent fractions:**

a) $\frac{7}{8} = \frac{56}{64} = \frac{63}{72}$ b) $\frac{1}{6} = \frac{3}{18} = \frac{8}{48}$

c) $\frac{9}{12} = \frac{81}{108} = \frac{27}{36}$ d) $\frac{2}{4} = \frac{6}{12} = \frac{8}{16}$

3. **a) Write 5 equivalent fractions of $\frac{3}{5}$**

$\frac{3}{5} \times \frac{2}{2} = \frac{6}{10}$

$\frac{3}{5} \times \frac{3}{3} = \frac{9}{15}$

$\frac{3}{5} \times \frac{4}{4} = \frac{12}{20}$

$\frac{3}{5} \times \frac{5}{5} = \frac{15}{25}$

$\frac{3}{5} \times \frac{6}{6} = \frac{18}{30}$

Ans. 5 equivalent fractions are $\frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \frac{15}{25}, \frac{18}{30}$

b) **Write 3 equivalent fractions of $\frac{2}{9}$**

$\frac{2}{9} \times \frac{2}{2} = \frac{4}{18}$

$\frac{2}{9} \times \frac{3}{3} = \frac{6}{27}$

$\frac{2}{9} \times \frac{4}{4} = \frac{8}{36}$

Ans. 3 equivalent fractions are $\frac{4}{18}, \frac{6}{27}, \frac{8}{36}$

c) **Write 4 equivalent fractions of $\frac{3}{8}$**

$\frac{3}{8}$ X $\frac{2}{2} = \frac{6}{16}$

$\frac{3}{8}$ X $\frac{3}{3} = \frac{9}{24}$

$\frac{3}{8}$ X $\frac{4}{4} = \frac{12}{32}$

$\frac{3}{8}$ X $\frac{5}{5} = \frac{15}{40}$

Ans. 4 equivalent fractions are $\frac{6}{16}$, $\frac{9}{24}$, $\frac{12}{32}$, $\frac{15}{40}$

4. Write equivalent fractions of $\frac{16}{24}$ with

a) denominator 3

$\frac{16}{24}$ = $\frac{16 \div 8}{24 \div 8} = \frac{2}{3}$

Thus, $\frac{2}{3}$ is a required fraction.

b) numerator 32

$\frac{16}{24}$ = $\frac{16 \text{ X } 2}{24 \text{ X } 2} = \frac{32}{48}$

Thus, $\frac{32}{48}$ is a required fraction.

5. Write equivalent fractions by division:

a) $\frac{64}{72} = \frac{64 \div 8}{72 \div 8} = \frac{8}{9}$

b) $\frac{33}{66} = \frac{33 \div 11}{66 \div 11} = \frac{3}{6} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$

6. Check whether following pairs are equivalent or not:

a) $\frac{3}{10}$, $\frac{2}{5}$

We cross multiply $\frac{3}{10}$ and $\frac{2}{5}$

$$= \frac{3\ X\ 5}{10\ X\ 2} = \frac{15}{20}$$

Since, the products are not same, $\frac{3}{10}$ and $\frac{2}{5}$ are not equivalent.

b) $\frac{4}{7}$, $\frac{24}{42}$

We cross multiply $\frac{4}{7}$ and $\frac{24}{42}$

$$= \frac{4\ X\ 42}{7\ X\ 24} = \frac{168}{168}$$

Since, the products are same, $\frac{4}{7}$ and $\frac{24}{42}$ are equivalent.

7. Express the following improper fraction as mixed numbers:

a) $\frac{19}{5}$

$$5\overline{)19}\ 3$$
$$15$$
$$4$$

Ans. $\mathbf{3\frac{4}{5}}$

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

$$7\overline{)17}\ 2$$
$$14$$
$$3$$

Ans. $\mathbf{2\frac{3}{7}}$

8. Express the following mixed numbers as improper fractions:

a) $4\frac{3}{7}$

$$4\frac{3}{7} = \frac{(7 \text{ X } 4)+ 3}{7} = \frac{28+3}{7} = \frac{31}{7}$$

Ans. $\mathbf{\frac{31}{7}}$

b) $5\frac{2}{3}$

$$5\frac{2}{3} = \frac{(3 \text{ X } 5)+ 2}{3} = \frac{15+2}{3} = \frac{17}{3}$$

Ans. $\mathbf{\frac{17}{3}}$