Educonclave

Choose the correct option:

1. The fraction equivalent to $\dfrac{45}{81}$ is

   (a) $\dfrac{90}{243}$ (b) $\dfrac{15}{9}$ (c) $\dfrac{5}{27}$ (d) $\dfrac{5}{9}$

2. The fraction whose numerator is the smallest odd prime number and denominator is the smallest composite number is

   (a) $\dfrac{3}{4}$ (b) $\dfrac{2}{4}$ (c) $\dfrac{4}{3}$ (d) $\dfrac{4}{2}$

3. Which of the following is an improper fraction

   (a) $\dfrac{2}{3}$ (b) $\dfrac{3}{4}$ (c) $\dfrac{4}{5}$ (d) $\dfrac{5}{4}$

4. Which of the following is the difference between $\dfrac{7}{8}$ and $\dfrac{3}{8}$

   (a) $\dfrac{4}{5}$ (b) $\dfrac{1}{2}$ (c) $\dfrac{3}{2}$ (d) $\dfrac{10}{5}$

5. Which of the following statements is false:

   (a) $\dfrac{9}{16} = \dfrac{5}{9}$ (b) $\dfrac{6}{7} > \dfrac{3}{5}$ (c) $\dfrac{3}{4} < \dfrac{1}{2}$ (d) $\dfrac{1}{9} \neq \dfrac{1}{3}$

Fill in the blanks:

6. A proper fraction lies between 0 and

7. $13\dfrac{5}{8}$ is a _____ fraction.

8. In two like fractions, the fraction having smaller numerator is

State true or false:

9. $\dfrac{2}{9}$ and $\dfrac{6}{27}$ are equivalent.

10. $5 - 1\dfrac{3}{4} = 4\dfrac{1}{4}$

11. Find the equivalent fraction of $\dfrac{3}{5}$ having

    (a) Denominator 30   (b) Numerator 27

12. Replace $\star$ with the correct number:

    (a) $\dfrac{2}{3} = \dfrac{\star}{15}$ (b) $\dfrac{7}{18} = \dfrac{42}{\star}$ (c) $\dfrac{\star}{11} = \dfrac{70}{154}$

13. Compare the following pairs of fractions

    (a) $\dfrac{5}{9}$ and $\dfrac{4}{5}$ (b) $\dfrac{9}{16}$ and $\dfrac{5}{9}$

14. Fill in the blanks with $>, <$ or $=$

(a) $\dfrac{5}{11} - \dfrac{3}{7}$

(b) $\dfrac{8}{15} - \dfrac{3}{5}$

(c) $\dfrac{11}{14} - \dfrac{29}{35}$

15. Arrange the following in ascending order

(a) $\dfrac{3}{4}, \dfrac{5}{12}, \dfrac{9}{16}$

(b) $\dfrac{7}{12}, \dfrac{11}{36}, \dfrac{37}{72}$

16. Arrange the following in descending order

(a) $\dfrac{5}{12}, \dfrac{9}{16}, \dfrac{3}{4}$

(b) $\dfrac{7}{8}, \dfrac{15}{6}, \dfrac{5}{6}$

17. Work out the following:

(a) $3\dfrac{2}{7} - 1\dfrac{4}{7}$

(b) $\dfrac{2}{3} + \dfrac{3}{4}$

(c) $\dfrac{5}{7} - \dfrac{4}{9}$

(d) $1\dfrac{4}{9} - 3\dfrac{5}{12}$

18. Simplify:

(a) $3\dfrac{2}{9} + 2\dfrac{1}{3} + 2\dfrac{7}{12}$

(b) $1\dfrac{3}{25} + \dfrac{7}{20} - \dfrac{2}{5}$

(c) $3 - 1\dfrac{1}{6} - \dfrac{7}{15}$

Case Based Question

19. One day a labourer earned ₹ $58\dfrac{1}{2}$. Out of this, he spent ₹ $18\dfrac{3}{4}$ on food and ₹ $6\dfrac{1}{5}$ on other needs. How much money is left with him?

20. Jaidev takes $2\dfrac{2}{5}$ minutes to walk across the school ground. Rahul takes $2\dfrac{1}{4}$ minutes to do the same. Who takes less time and by what fraction?