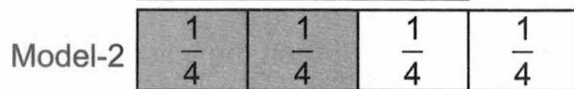
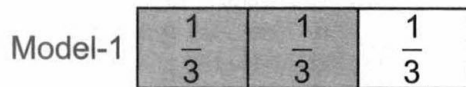


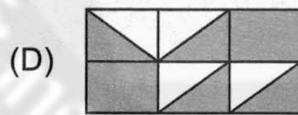
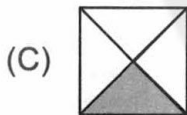
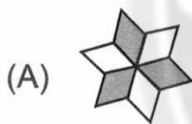
## Fractions

### MATHEMATICAL REASONING

1. The models are shaded to show which of the following?



- (A)  $\frac{1}{3} = \frac{2}{4}$       (B)  $\frac{1}{4} > \frac{1}{3}$   
 (C)  $\frac{2}{3} < \frac{2}{4}$       (D)  $\frac{2}{4} < \frac{2}{3}$
2. The sum of two fractions is  $\frac{3}{5}$ . If one of the fractions is  $\frac{7}{12}$ , then find the difference of two fractions.
- (A)  $\frac{17}{30}$    (B)  $\frac{33}{60}$    (C)  $\frac{15}{17}$    (D)  $\frac{5}{12}$
3. In which of the following figures does the unshaded portion represents  $\frac{2}{3}$ ?



4. A pasta recipe requires  $2\frac{2}{3}$  kg cheese. Approximately, how much pasta can be made from a 21 kg cheese?

(A)  $7\frac{7}{8}$    (B)  $7\frac{4}{8}$    (C)  $6\frac{7}{8}$    (D)  $6\frac{4}{8}$

5. Which number should come in place of \*?

$$\frac{*}{4} + \frac{1}{6} + \frac{5}{12} = 1\frac{1}{3}$$

(A) 5   (B) 7   (C) 3   (D) 1

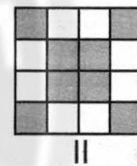
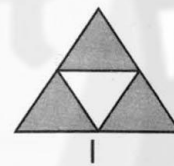
6. Which of the following is arranged in ascending order?

$$\frac{5}{14}, \frac{4}{7}, \frac{3}{8}, \frac{1}{16}, \frac{1}{4}$$

(A)  $\frac{5}{14}, \frac{4}{7}, \frac{3}{8}, \frac{1}{16}, \frac{1}{4}$    (B)  $\frac{4}{7}, \frac{5}{14}, \frac{1}{16}, \frac{1}{4}, \frac{3}{8}$

(C)  $\frac{1}{16}, \frac{1}{4}, \frac{5}{14}, \frac{3}{8}, \frac{4}{7}$    (D)  $\frac{5}{14}, \frac{1}{16}, \frac{4}{7}, \frac{1}{4}, \frac{3}{8}$

7. What is the sum of the shaded parts of the given figures?



(A)  $1\frac{2}{3}$    (B)  $1\frac{1}{4}$    (C)  $1\frac{3}{4}$    (D)  $2\frac{1}{4}$

8. A small tank is  $\frac{2}{5}$  full of water. The water is then poured into a large empty tank which has a capacity which is twice that of the small tank. What fraction of the large tank is filled with water?

(A)  $\frac{3}{5}$    (B)  $\frac{2}{5}$    (C)  $\frac{1}{5}$    (D)  $\frac{4}{5}$

9. How many one-fourths need to be added to  $2\frac{1}{4}$  to make 5?

(A) 11 (B) 18 (C) 9 (D) 2

10. Which of the following is true for the shaded fractions of models shown below?

Model-1



Model-2



P : Shaded fraction of model-1

Q : Shaded fraction of model-2

- (A)  $P = Q$  (B)  $P < Q$   
 (C)  $P > Q$  (D) None of these
11. Which of the following pairs of fractions are not equivalent?

(A)  $\frac{12}{14}, \frac{60}{70}$  (B)  $\frac{36}{81}, \frac{72}{162}$   
 (C)  $\frac{21}{20}, \frac{63}{60}$  (D)  $\frac{8}{13}, \frac{72}{78}$

12. If the two fractions have same numerator, then the fraction with

(A) greater denominator is greater  
 (B) greater denominator is smaller  
 (C) greater numerator is smaller  
 (D) None of these

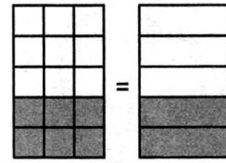
13. What fraction of a day is 4 hours?

(A)  $\frac{1}{6}$  (B)  $\frac{1}{3}$  (C)  $\frac{2}{3}$  (D)  $\frac{1}{4}$

14. Which of the following options is incorrect?

(A)  $\frac{3}{4} > \frac{2}{3}$  (B)  $\frac{4}{5} > \frac{1}{3}$   
 (C)  $\frac{9}{7} > 1$  (D)  $\frac{1}{2} < \frac{1}{4}$

15. Write the equivalent fractions represented by the shaded portions of the given figures.



(A)  $\frac{2}{10} = \frac{3}{5}$  (B)  $\frac{6}{15} = \frac{2}{5}$   
 (C)  $\frac{6}{10} = \frac{2}{5}$  (D)  $\frac{3}{15} = \frac{1}{5}$

16. Reena eats one full bar of chocolate. Then she divides another one into 5 equal parts and eats 3 of those parts. The fraction of chocolates she has eaten is \_\_\_\_\_.

(A)  $\frac{2}{5}$  (B)  $\frac{3}{5}$  (C)  $\frac{8}{5}$  (D)  $\frac{8}{10}$

17. If  $\frac{3}{4} = \frac{x}{28} = \frac{y}{32}$ , then the values of x and y respectively are \_\_\_\_\_ and \_\_\_\_\_.

(A) 21, 24 (B) 21, 28  
 (C) 18, 24 (D) 21, 25

18. Find a, if  $5\frac{1}{3} - 3\frac{2}{3} \div 1\frac{1}{3} \div a + 3\frac{1}{5} \div 1\frac{1}{5} = 7$

(A)  $1\frac{1}{2}$  (B)  $2\frac{1}{3}$   
 (C)  $3\frac{1}{4}$  (D) None of these

19. Simplify :  $4\frac{3}{5} - 2\frac{7}{9} - 1\frac{2}{15} - \frac{2}{5}$

(A)  $\frac{14}{45}$  (B)  $\frac{13}{45}$  (C)  $\frac{16}{45}$  (D)  $\frac{12}{45}$

20. Find the value of m and n respectively.

$$5\frac{1}{m} \times n\frac{3}{4} = 20$$

(A) 3, 1 (B) 3, 3 (C) 4, 1 (D) 5, 3

## EVERYDAY MATHEMATICS

21. Tarun had  $\frac{3}{4}$  kg of flour. He used  $\frac{1}{5}$  kg to make chapatti. How much quantity of flour he has left with?

(A)  $\frac{1}{4}$  kg (B)  $\frac{11}{20}$  kg

(C)  $1\frac{1}{4}$  kg (D)  $\frac{1}{2}$  kg

22. Karan spent half of his pocket money to buy a pair of shoes. He spent half the remaining for a book. He also spent half

the remaining to buy a study table. He was left with ₹ 350. With how much money he started his shopping?

- (A) ₹ 4000 (B) ₹ 3000  
(C) ₹ 2800 (D) ₹ 1080

23. Vikas had 128 stickers. He gave  $\frac{3}{8}$  of his stickers to his father and  $\frac{1}{4}$  of his stickers to his brother. How many stickers did he left with?  
(A) 50 (B) 65 (C) 80 (D) 48

24. Sudha planted tomatoes in  $\frac{1}{2}$  portion of her kitchen garden. She planted spinach in one-fourth of the remaining portion. What fraction of the garden has spinach?

- (A)  $\frac{1}{2}$  (B)  $\frac{1}{3}$  (C)  $\frac{1}{8}$  (D)  $\frac{1}{5}$

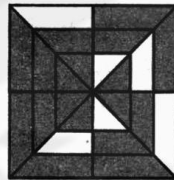
25. Four families went on a picnic. Each family carried a cake for the picnic.  $\frac{3}{4}$  of each cake was eaten. How much cake was eaten in all?

- (A)  $\frac{3}{8}$  (B) 3 (C)  $\frac{9}{12}$  (D) 1

## ACHIEVERS SECTION (HOTS)

26. What fraction of the given figure is shaded?

- (A)  $\frac{7}{8}$   
(B)  $\frac{5}{8}$   
(C)  $\frac{1}{2}$   
(D)  $\frac{3}{4}$



27. The value of  $3\frac{1}{12} - \left[ 1\frac{3}{4} + \left\{ 2\frac{1}{2} - \left( 1\frac{1}{2} - \frac{1}{3} \right) \right\} \right]$  is \_\_\_\_.

- (A)  $\frac{1}{2}$  (B) 2 (C) 1 (D) 0

28. Look at the alphabets given below and answer the given questions.

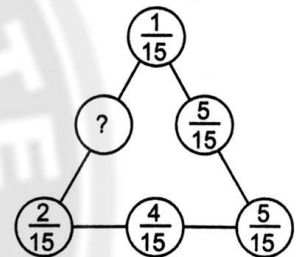
RASHMI

- (a) What fraction of alphabets are made up of exactly 3 straight lines?  
(b) What fraction of alphabets are made up of curved lines?

- | (a)               | (b)           | (a)               | (b)           |
|-------------------|---------------|-------------------|---------------|
| (A) $\frac{5}{6}$ | $\frac{4}{6}$ | (B) $\frac{1}{2}$ | $\frac{1}{3}$ |
| (C) $\frac{2}{6}$ | $\frac{3}{6}$ | (D) $\frac{1}{3}$ | $\frac{1}{3}$ |

29. What should be placed in the place of '?' so that the sum of fractions on each side of the triangle is same?

- (A)  $\frac{7}{15}$   
(B)  $\frac{9}{15}$   
(C)  $\frac{6}{15}$   
(D)  $\frac{8}{15}$



30. Which of the following statements is correct?

**Statement-1** : Mrs Soni bought  $7\frac{1}{2}$  litres of milk. Out of this,  $5\frac{3}{4}$  litres was consumed.  $1\frac{1}{3}$  litres of milk is left with her.

**Statement-2** : Amit reads  $\frac{3}{5}$  of a book. He finds that there are still 80 pages left to be read. Total number of pages in the book is 200.

- (A) Only Statement-1  
(B) Only Statement-2  
(C) Both Statement-1 and Statement-2  
(D) Neither Statement-1 and nor Statement-2