Fractions and Decimals

MATHEMATICS Comprehensive Book

QUESTIONS

- **1.** Improper fraction is a fraction whose
 - (a) numerator is less than the denominator.
 - (b) numerator is more than the denominator.
 - (c) numerator and denominator are equal.
 - (d) numerator and denominator have equal common factors
 - (e) None of these
- **2.** Example of a fraction in its simplest form is _____.

(a)
$$\frac{13}{1287}$$
 (b) $\frac{7}{9}$

- (c) $\frac{17}{867}$ (d) All the above
- (e) None of these
- **3.** Which one among the following statements is true?
 - (a) fractions with same denominators are called unlike fractions.
 - (b) $\frac{250}{100} = 0.25$ (c) $12\frac{3}{5} = \frac{180}{5}$ (d) $\frac{125}{20} = 6.25$ (e) None of these If $\frac{9}{5} = \frac{18}{x}$, than value of x is_____.

(e) None of these

4.

5. If on adding $\frac{5}{24}$ to a fraction, it gives $3\frac{5}{13}$. Find the fraction.

(a)
$$\frac{991}{332}$$
 (b) $\frac{991}{312}$
(c) $\frac{91}{312}$ (d) $\frac{91}{312}$

(c)
$$\frac{1}{332}$$
 (d) $\frac{1}{312}$

- (e) None of these
- **6.** Which of the following fractions is the greatest?

 $\frac{4}{7}, \frac{4}{9}, \frac{4}{9}, \frac{7}{8}, \frac{1}{3}$ (a) $\frac{4}{7}$ (b) $\frac{7}{6}$ (c) $\frac{4}{9}$ (d) $\frac{7}{8}$

The fraction represented by shaded portion in the adjoining figure is_____. 7.

	(a) $\frac{1}{2}$	(b) $\frac{1}{3}$
	(c) $\frac{2}{3}$	(d) $\frac{4}{9}$
	(e) None of these	
8.	Which one among the following statements is true	??
	(a) 6807 g = 680.7 decigram	
	(b) 5034 cm = 503.4 m	
	(c) 0.8345 lies between 0.83 and 0.85	
	(d) All the above	
	(e) None of these	
9.	The two Consecutive integers between which the	fraction "lies are
	(a) 0 and 1	(b) 1 and 2
	(c) 2 and 3	(d) 3 and 4
	(e) None of these	
10.	Is equal to	
	(a) 0.006	(b) 0-06
	(c) 0.08	(d) 0.008
	(e) None of these	
11.	0.0208 is equal to	
	(a) $\frac{13}{625}$	(b) $\frac{18}{625}$
	(c) $\frac{14}{1}$	(d) $\frac{28}{3}$
	625	625
	(e) None of these	
12.	Solve: 0.7 + 0.08 + 0.009 + 0.0001 + 0,1987	
	(a) 0.9878	(b) 0.9787
	(c) 0.9658	(d) 0.9877
	(e) None of these	
13.	A cup is $\frac{1}{4}$ full of milk. What part of the cup is stil	l to be filled by milk to make it full?
	(a) $\frac{1}{2}$	(b) $\frac{3}{4}$

(c)
$$\frac{1}{4}$$
 (d) $\frac{1}{8}$

14. On weighing himself on Sunday, Ramendra found that he had gained $3\frac{4}{5}$ kg. Earlier his weight was $41\frac{2}{8}$ kg. What was his weight on Sunday?

(a)
$$45\frac{1}{40}$$
 kg
(b) $43\frac{1}{20}$ kg
(c) $45\frac{1}{20}$ kg
(d) $44\frac{1}{40}$ kg

(e) None of these

15. Arrange the following fractions in correct ascending order.

 $\frac{8}{9}, \frac{1}{2}, \frac{7}{8}, \frac{5}{6}$

(a) $\frac{1}{2} > \frac{5}{6} > \frac{7}{8} > \frac{8}{9}$	(b) $\frac{1}{2} > \frac{7}{8} > \frac{5}{6} > \frac{8}{9}$
(c) $\frac{1}{2} > \frac{5}{6} > \frac{7}{8} > \frac{8}{9}$	(d) $\frac{1}{2} > \frac{7}{8} > \frac{5}{6} > \frac{8}{9}$

(e) None of these

16. Identify the wrong statement in the following:

(a) $\frac{7}{4} \div \frac{4}{7} = \frac{7}{4} \times \frac{4}{7}$	(b) $\frac{7}{4} + \frac{7}{4} = \frac{4}{18}$
(c) $\frac{3}{5} + \frac{1}{5} - \frac{2}{5} = \frac{2}{5}$	(d) $1 \div \frac{1}{2} = 2$

(e) None of these

17. What should be added to 39.685 kg to get 400 hectogram?

(a) 3.15gm	(b) 3.15 hectogram
(c) 37.5 Hectogram	(d) 370.315 Hectogram
(e) None of these	

18. One-fourth of an amount is added to its one-fifth part. The resulting amount will be _____

- (a) nine-fifth of the amount (b) one-fifth of the amount
- (c) nine-twenty of the amount (d) one-ninth of the amount
- (e) None of these

19. If
$$\frac{1}{11} = \frac{x}{121} = \frac{132}{y}$$
, then find the value of $\frac{x+y}{7}$.
(a) 1463 (b) 209
(c) 336 (d) 463

20. Find the reciprocal of the shaded part in the figure given below:



21. Which one of the following represents the shaded parts shown in the given figure?



(e) None of these

23.

24.

25.

22. The ratio between the shaded part of a circle o its unshaded part is 3: 5 then the part of the circle, which is shaded is _____.

(a) $\frac{3}{8}$	(b)	$\frac{5}{8}$
(c) $\frac{1}{4}$	(d)	$\frac{3}{5}$
(e) None of these		
On subtracting $\frac{7}{13}$ from $\frac{63}{65}$ we get		
(a) $\frac{24}{65}$	(b)	$\frac{31}{65}$
(c) $\frac{28}{65}$	(d)	$\frac{19}{65}$
(e) None of these		
15.009 - 2.61 + 12,908 is equal to		
(a) 15.368	(b)	25.307
(c) 24.367	(d)	25367
(e) None of these		
377.686 in its nearest hundredths is		
(a) 378	(b)	377.700
(c) 377.69	(d)	377.680
(e) None of these		

26 .	6 hundredths +5 tenths + 8 one's is equal to $_$	·
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(a) 8.056	(b) 8.56
(c) 658	(d) 65.8

27. Write the values of x and y in decimal number and solve (x + y).(y - x)

← ++++ 0	+ + . x	1	+	-+	-+-	 + + y	+ + 3	+ + +	 4	
(a) 3.6										(b) 5.12
(c) 5.02										(d) 4.82

(e) None of these

28. 2399.9?9 round off to its nearest hundredths is 2400.00.

Which one among the following digits will replace'?' to make the above statement true?

(a) 6	(b) 2
(c) 9	(d) 0

(e) None of these

Directions (29-30): Energy Content of different are as follows:

Food type	Food energy (k cal per gm)
Maize meal	3.57
Beans	4.05
Vegetable	0.27
Meat	2.37
Soul milk	1.22

Based on above information answer the following.

29. Identify the food types, which provide least energy and maximum energy and write the difference of their food energies in fraction.

(a)	$\frac{33}{10}$	(b)	$\frac{189}{50}$
(c)	$\frac{21}{10}$	(d)	$\frac{61}{50}$

(e) None of these

30. If each food types are arranged as per their food energy in descending order, choose the correct order.

- (a) Maize Meal, Beans, Meat, Sour milk. Vegetables
- (b) Beans, Maize Meal, Meat, Sour milk. Vegetables
- (c) Beans, Maize Meal, Sour milk. Meat, Vegetables
- (d) Vegetables, Sour milk, meat, maize meal. Beans
- (e) None of these

31. If , represents the unshaded portion of a figure, then the figure is _____



(e) None of these

32. Find the difference between the largest five digit decimal the number less than 1 using the digits 1, 2, 0, 7 and 4.

(a) 0.72936	(b) 0.75484
(c) 0.62936	(d) 0.65484

(e) None of these

33. 33. What fraction of a straight angle is 25°?

(a)
$$\frac{1}{36}$$
 (b) $\frac{1}{12}$
(c) $\frac{5}{36}$ (d) $\frac{1}{10}$

(e) None of these

34. The fraction which represents the all two digit prime numbers to number of all two digit numbers, is _____

(a) $\frac{7}{30}$	(b) $\frac{19}{91}$
(c) $\frac{17}{90}$	(d) $\frac{1}{10}$

(e) None of these

35. The fraction, which is equivalent to $\frac{1}{3}$ and having the numerals 1, 2, 3, 4, 5, 6, 7, 8 and 9, is _____

(a)	<u>1234</u> 56789	(b)	$\frac{6234}{54789}$
(c)	<u>5834</u> 17469	(d)	$\frac{5423}{17869}$

36. If represents a meter of distance then
(a)
$$\frac{11}{20}$$
 m
(b) $1\frac{11}{20}$ m
(c) $1\frac{31}{20}$ m
(d) $1\frac{11}{20}$ m

The fish Caught by Yashika weighted $2\frac{3}{4}$ kg and the fish caught by Kanika was of weight $10\frac{4}{5}$ gm less than that of 37. Yashika's. Find the weight of fish caught by Kanika.

- (a) 2.739 kg (b) 2.825 kg (d) 2.892 kg (c) 3.025 kg
- (e) None of these

In a school, total number of boys are $\frac{2}{5}$ of the number of girls. If the total number of students are 2884 then find the 38. difference in fraction between the number of boys and girls.

(a)	2060 2884	(b)	$\frac{1030}{2884}$
(c)	<u>309</u> 721	(d)	$\frac{329}{823}$

(e) None of these

Choose the correct order of mathematical operations $+, -, \times, \div, =$ in the following so that it becomes true. 39.

$\frac{13}{147} - \frac{104}{35} + \frac{13}{21} = \frac{43}{42} + \frac{17}{23} \div \frac{69}{136}$	
(a) $\frac{13}{147} \div \frac{104}{35} = \frac{13}{21} \div \frac{43}{42} - \frac{17}{23} \times \frac{69}{136}$	(b) $\frac{13}{147} + \frac{104}{35} \div \frac{13}{21} = \frac{43}{42} - \frac{17}{23} \times \frac{69}{136}$
(c) $\frac{13}{147} \div \frac{104}{35} + \frac{13}{21} = \frac{43}{42} - \frac{17}{23} \times \frac{69}{136}$	(d) $\frac{13}{147} \times \frac{104}{35} + \frac{13}{21} = \frac{43}{42} - \frac{17}{23} \div \frac{69}{136}$

(e) None of these

40. Which one among the following figure is representing a correct fraction of shaded to unshaded portion.





(d) all the above

ANSWER - KEY					
1. (b)	2. (b)	3. (d)	4. (a)	5. (b)	
6. (d)	7. (b)	8. (c)	9. (a)	10. (c)	
11. (a)	12. (a)	13. (b)	14. (c)	15. (c)	
16. (b)	17. (b)	18. (c)	19. (b)	20. (c)	
21. (b)	22. (a)	23. (c)	24. (b)	25. (c)	
26. (b)	27. (b)	28. (c)	29. (b)	30. (b)	
31. (b)	32. (a)	33. (c)	34. (a)	35. (c)	
36. (b)	37. (a)	38. (c)	39. (c)	40. (b)	