Fractions and Decimals

Question 1.
What is $\frac{1}{7}$ of 49 litres?
(a) 11
(b) 51
(c) 71
(d) 61

Answer: (c) 71

Question 2.
Find $\frac{2}{7}$ x 3.
(a) $\frac{5}{7}$
(b) $\frac{6}{7}$
(c) $\frac{1}{7}$
(d) none of these

Answer: (b) $\frac{6}{7}$
Numerator is multiplied by numerator.

Question 3.
If 43m =0.086 then m has the value
(a) 0.002
(b) 0.02
(c) 2
(d) 0.2

Answer: (a) 0.002

Question 4.
Write the place value of 2 in the following decimal numbers : 2.56
(a) 5
(b) .06
(c) 2
(d) None of these

Answer: (c) 2
As 2 is at ones place.

Question 5.
$0.01 \times 0.01 =$ _____
(a) 0.0001
(b) 0.001
(c) 1
(d) 0.1

Answer: (a) 0.0001

Question 6.
Find 0.2 x 0.3
(a) 0.6
(b) 0.06
(c) 6
(d) None of these

Answer: (b) 0.06
Number of decimal places in the question is always equal to the number of places in the answer.

Question 7.
Which of the following is an improper fraction?
(a) $\frac{20}{70}$
(b) $\frac{30}{40}$
(c) $\frac{50}{20}$
(d) $\frac{70}{80}$

Answer: (c) $\frac{50}{20}$

Question 8.
What is $\frac{1}{2}$ of 10.
(a) 6
(b) 4
(c) 3
(d) 5

Answer: (d) 5
Numerator is divided by denominator.

Question 9.
Find the area of rectangle whose length is 6.7 cm and breadth is 2 cm.
(a) 13 cm^2
(b) 13.4 cm^2
(c) 13.8 cm^2
(d) 14 cm^2

Answer: (b) 13.4 cm^2

Question 10.
Express 5 cm in metre.
(a) .05
(b) .5
(c) .005
(d) None of these

Answer: (a) .05
As 1 metre contains 100 cm, therefore given number is divided by 100.

Question 11.
Which amongst the following is the largest?
|-89|, -89, -21, |-21|
(a) -89
(b) -21
(c) |-89|
(d) |-21|

Answer: (c) |-89|

Question 12.
The side of an equilateral triangle is 3.5 cm. Find its perimeter.
(a) 10.5 cm
(b) 1.05 cm
(c) 105 cm
(d) None of these

Answer: (a) 10.5 cm
Perimeter of a equilateral triangle is 3a.

Question 13.
Provide the number in the box $\cong$ such that $\frac{3}{5}$ x $\cong$ = $\frac{24}{75}$.
(a) $\frac{7}{15}$
(b) $\frac{8}{15}$
(c) $\frac{5}{3}$
(d) none of these

Answer: (b) $\frac{8}{15}$
Result is divided by given number.

Question 14.
What is the fraction of the shaded area?

(a) $\frac{2}{3}$
(b) $\frac{1}{3}$
(c) $\frac{1}{4}$
(d) None of these

Answer: (a) $\frac{2}{3}$

Question 15.
Which of the following is a proper fraction?
(a) $\frac{28}{15}$

(b) $\frac{21}{23}$

(c) $\frac{16}{7}$

(d) $\frac{34}{3}$

Answer: (b) $\frac{21}{23}$

Question 16.
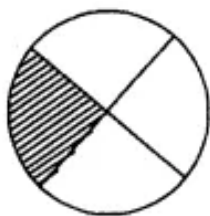Compare 0.5 and 0.05.
(a) =
(b) >
(c) <
(d) None of these

Answer: (b) >
Here, whole number part in each decimal is equal to zero. So, whole number parts are equal. Therefore, we will compare the decimal part.

Question 17.
What does this drawing show :

(a) $\frac{1}{3}$

(b) $\frac{1}{2}$

(c) $\frac{1}{6}$

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

Answer: (d) $\frac{1}{4}$
One is taken out of four.

Question 18.
Find the area of rectangle whose length is 5.7 cm and breadth is 3 cm.
(a) 171 cm^2
(b) 1.71 ccm^2

(c) 17.1 cm^2
(d) None of these

Answer: (c) 17.1 cm^2
Area of rectangle is length x breadth.

Question 19.
What should be added to $\frac{21}{27}$ to make it $\frac{26}{27}$?
(a) $\frac{26}{27}$
(b) $\frac{6}{27}$
(c) $\frac{5}{27}$
(d) $\frac{7}{27}$

Answer: (c) $\frac{5}{27}$

Question 20.
What are fractions with different denominators called?
(a) Like
(b) Unlike
(c) Proper
(d) Improper

Answer: (b) Unlike

Question 21.
Express 7 paise in rupees.
(a) $\frac{7}{10}$
(b) $\frac{7}{100}$
(c) $\frac{7}{1000}$
(d) None of these

Answer: (b) $\frac{7}{100}$
As 1 rupee contains 100 paise, therefore given number is divided by 100.

Question 22.
Which is greater $\frac{2}{7}$ or $\frac{3}{7}$.

(a) $\frac{2}{7}$

(b) $\frac{3}{7}$

(c) both are equal

Answer: (b) $\frac{3}{7}$

As numerator is greater and denominator are same.

Question 23.

Find the reciprocal of $\frac{5}{8}$.

(a) $\frac{8}{5}$

(b) 5

(c) 8

(d) none of these

Answer: (a) $\frac{8}{5}$

As reciprocal are numbers whose product is 1.

Question 24.

Indian cricket team won 4 more matches than it lost with New Zealand. If it won $\frac{3}{5}$ of its matches, how many matches did India play?

(a) 8

(b) 12

(c) 16

(d) 20

Answer: (d) 20

Question 25.

What is the equivalent fraction of $\frac{8}{11}$ having the numerator 40?

(a) $\frac{40}{11}$

(b) $\frac{44}{40}$

(c) $\frac{40}{55}$

(d) $\frac{10}{40}$

Answer: (c) $\frac{40}{55}$

Question 26.
Write the place value of 2 in the following decimal numbers : 10.25
(a) 2 tens
(b) 2 tenths
(c) None of these

Answer: (b) 2 tenths
As 2 is an at tenth place.

Question 27.
Guru reads $\frac{3}{5}$ of a book. He finds that there are still 80 pages left to be read. What is the total number of pages in the book?
(a) 100
(b) 200
(c) 300
(d) 400

Answer: (b) 200

Question 28.
Write in mixed fraction $\frac{54}{7}$
(a) $7\frac{5}{7}$
(b) $7\frac{7}{5}$
(c) $5\frac{7}{7}$
(d) None of these

Answer: (a) $7\frac{5}{7}$
By long division we get proper fraction.

Question 29.
2.05 x 1.3 equals to
(a) 2.665
(b) 2.667
(c) 2.323
(d) 2.456

Answer: (a) 2.665

Question 30.
Express 200 g in kg.
(a) .02
(b) .002
(c) .2
(d) None of these

Answer: (c) .2
As 1 kg contains 1000 grams, therefore given number is divided by 1000.

Question 31.
Compare 35.63 and 35.67.
(a) >
(b) <
(c) =
(d) None of these

Answer: (b) < Here, the whole number are equal. So we compare the decimals. In decimal part, the extreme left digits are equal. So we compare next digits $7 > 3 : 35.67 > 35.63$

Question 32.
Find the perimeter of a square whose one side is 1.6 cm.
(a) 6.4 cm
(b) 64 cm
(c) .64 cm
(d) None of these

Answer: (a) 6.4 cm
Perimeter of square is obtained by multiplying its side by four.

Question 33.
($\frac{1}{3}$) of 3 is ____
(a) 2
(b) 1
(c) 3
(d) none of these

Answer: (b) 1

Question 34.
Write the following decimal numbers in the expanded form 20.03.
(a) $2 \times 10 + 0 \times \frac{1}{10} + 3 \times \frac{3}{100}$
(b) $2 \times 10 + 3 \times \frac{1}{100}$
(c) None of these

Answer: (a) $2 \times 10 + 0 \times \frac{1}{10} + 3 \times \frac{3}{100}$
$2 \times 10 = 20$. $3 \times \frac{1}{100} = \frac{3}{100} = 0.03$
$20 + 0.03 = 20.03$

Question 35.
Given that $\frac{p}{q} = \frac{s}{t}$, which of these is true?
(a) pq = st
(b) ps = qt
(c) pt = sq
(d) pt = st

Answer: (c) pt = sq

Question 36.
Three sides of a triangle are 12, 10 and 8, its perimeter is :
(a) 30
(b) 15
(c) 25
(d) None of these

Answer: (a) 30
Perimeter of a triangle is sum of three sides, i.e., a + b + c.

Question 37.
$(\frac{1}{2}) \times (\frac{1}{5}) =$ _____
(a) $\frac{1}{7}$
(b) $\frac{1}{10}$
(c) $\frac{5}{2}$
(d) $\frac{2}{5}$

Answer: (b) $\frac{1}{10}$

Question 38.
Express 35 mm in cm.
(a) 3.5
(b) .35
(c) .035
(d) None of these

Answer: (a) 3.5
As 1 cm contains 10 mm, therefore given number is divided by 10.

Question 39.
What will be $\frac{3}{4} \div 3$.
(a) $\frac{1}{4}$
(b) $\frac{1}{3}$
(c) $\frac{9}{4}$
(d) None of these

Answer: (a) $\frac{1}{4}$
1st number is multiplied by reciprocal of second number.

Question 40.
Find the average of 4.2, 3.8 and 7.6.
(a) 52
(b) .52
(c) 5.2
(d) None of these

Answer: (c) 5.2
Average can be found by dividing the sum of all numbers by the number of observations.

Question 41.
Thrice the first of three consecutive odd integers is 3 more than twice the third. The third integer is:
(a) 9
(b) 11
(c) 13
(d) 15

Answer: (d) 15

Question 42.
Express in kg : – 4 kg 8 g.
(a) 4.008
(b) 4.08
(c) 4.8
(d) None of these

Answer: (a) 4.008
Whole number is multiplied by 1000 and then 8 is added to it.

Question 43.
A rectangular sheet of paper is 12 cm long and 10 cm wide. Its perimeter is :
(a) 40
(b) 42
(c) 44
(d) None of these

Answer: (c) 44
Perimeter of a rectangle is 2(l + b).

Match the following:

Question 1.

1. 1 cm	(a) 1 kg
2. 100 cm	(b) 1 rupee
3. 1000 g	(c) .01 m
4. 100 paise	(d) 1 m

Answer:

1. 1 cm	(c) .01 m
2. 100 cm	(d) 1 m
3. 1000 g	(a) 1 kg
4. 100 paise	(b) 1 rupee

Question 2.

1. $\frac{3}{8}$	(a) $\frac{1}{2}$
2. $-\frac{5}{7}$	(b) 1
3. 1	(c) $-\frac{7}{5}$
4. 2	(d) $\frac{8}{3}$

Answer:

1. $\frac{3}{8}$	(d) $\frac{8}{3}$
2. $-\frac{5}{7}$	(c) $-\frac{7}{5}$
3. 1	(b) 1
4. 2	(a) $\frac{1}{2}$

state whether the statements are true or false:

Question 1.
A proper fraction is a fraction that represents a part of whole.

Answer: true

Question 2.
Like fractions have equal numerator.

Answer: false

Question 3.
$\frac{1}{2}$ x $\frac{1}{7}$ = $\frac{1}{14}$

Answer: true

Question 4.
4.1 x 100 = 41

Answer: false

1. Product of two fractions $= \dfrac{product \quad of \quad their \quad numerator}{\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots}$

Answer: product of their denominator

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2. Fractions having same denominators are …………….. fractions.

Answer: like

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3. Fractions having different denominators are ………… fractions.

Answer: unlike

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4. Fractions with numerator 1 are called ……………… fractions.

Answer: unit

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5. A mixed fraction is a combination of whole number and a ……….. fraction.

Answer: proper

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6. The non-zero numbers whose product with each other is 1 are called the ……………….. of each other.

Answer: reciprocals

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7. A reciprocal of a fraction is obtained by ………….. it upside down.

Answer: inverting

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8. All the sides of an equilateral triangle are …………….

Answer: equal