

Fractions-Exercise Questions updated on Dec 2024

1. $20.05 + 35.603 - \dots = 43.087$

- a. 10.263
- b. 12.566
- c. 15.426
- d. 13.286

2. Which of the following fraction is smallest?

- a. $\frac{23}{28}$
- b. $\frac{14}{15}$
- c. $\frac{15}{19}$
- d. $\frac{21}{24}$

3. 0.585858 is equivalent to the fraction....

- a. $\frac{58}{100}$
- b. $\frac{58}{99}$
- c. $\frac{85}{100}$
- d. $\frac{85}{99}$

4. The value of is

- a. $\frac{47}{198}$
- b. $3\frac{4}{198}$
- c. $\frac{48}{98}$
- d. $\frac{58}{36}$

5. $0.9 * 0.007 =$ _____

- a. 0.063
- b. 0.0063
- c. 0.63
- d. 0.00063

6. $0.0015 \div ? = 0.003$

- a. 0.05
- b. 0.005
- c. 0.5
- d. 5

7. $0.363 * 0.522 + 0.363 * 0.478 = ?$

- a. 0.522
- b. 0.845
- c. 0.363
- d. 0.985

8. If $7125,125 = 5700 <$ the value of $712.5 \div 12.5$ is:

- a. 5.7
- b. 57
- c. 570
- d. .57

9. The value of $34.31 * 0.473 * 1.567$ is close to

$0.0673 * 23.25 * 7.57$

- a. 2.0
- b. 1.15
- c. 2.05
- d. 2.15

10. Evaluate $\underline{(5.68)^2 - (4.32)^2}$

$$5.68 - 4.32$$

- a. 8
- b. 9
- c. 10
- d. 12

11. Evaluate $\frac{\underline{4.3 \times 4.3 \times 4.3 + 1}}{4.3 \times 4.3 - 4.3 + 1}$

$$4.3 \times 4.3 - 4.3 + 1$$

- a. 14.3
- b. 52.3
- c. 5.3
- d. 42.3

12. If $5 = 2.24$, then the value of $\underline{55}$ is 45.96

- a. 14
- b. 15.2
- c. 13.4
- d. 14.5

13. If $5.51 \times 10^k = 0.0551$, then the value of k is:

- a. -4
- b. -3
- c. -2
- d. -1

14. $\underline{25.25}$ is equal to: 2000

- a. 1.012526
- b. 0.012625
- c. 0.12526
- d. 0.12625

15. The value of $(2.502+0.064)^2 - (2.502-0.064)^2$

$$2.502 \times 0.064$$

- a. .25
- b. .235
- c. 4
- d. 3

16. The value of $4.5 \times 1.8 + 4.5 \times 8.2$

$$1.5 \times 4.5 + 1.5 \times 5.5$$

- a. 10
- b. 8
- c. 5
- d. 3

17. The value of $(.02)^2 + (0.52)^2 + (0.035)^2$

$$(0.002)^2 + (0.052)^2 + (0.0035)^2$$

- a. 100
- b. 1000
- c. .001
- d. .0001

18. Out of 200 donors, $\frac{1}{4}$ are men and remaining are women. Each male donor donates Rs.3000 per year and each female donor donates $\frac{1}{2}$ of that amount. What is the total yearly collection through donations?

- a. Rs.1, 50,000
- b. Rs.3, 75,000
- c. Rs.1, 40,300
- d. Rs.2, 25,000

19. One-fifth of Ramu's expenditure is equal to one-half of his savings. If his monthly income is Rs.6300 how much amount does he save?

- a. Rs.1550
- b. Rs.1800

c. Rs.2000

d. Rs.2350

20. The width of a rectangular hall is $\frac{1}{2}$ of its length. If the area of the hall is 450 sq.m, what is the difference between its length and breadth?

a. 8m

b. 10m

c. 12m

d. 15m

Answer & Explanations

1. Exp: $20.05 + 35.603 - 43.087 = 55.653 - 43.087 = 12.566$

2. Exp: $\frac{23}{28} = 0.821$

$\frac{28}{14} = 0.933$

$\frac{15}{15} = 0.7894$

$\frac{19}{21} = 0.875$

$\frac{24}{21}$

So, $\frac{15}{21} = 0.7894$ is smallest.

$\frac{19}{19}$

3. Exp: $0.585858 = \frac{58}{99}$

4. Exp: $= 3 + \frac{236-1}{990} = 3 \frac{47}{198}$

5. Exp: $9 * 7 = 63$

Sum of decimal places = 4

So, $0.9 * 0.007 = 0.0063$

6. Exp: Let $\underline{0.0015} = 0.003$

X

$X = \underline{0.0015} = 0.5$

0.003

7. Exp: Given Expression = $0.363 * (0.522 + 0.478) = 0.363 * 1 = 0.363$

8. Exp: Given $\frac{7125}{1.25} = 5700$

$\underline{712.5} = \underline{71.25} = \underline{7125 * 1} = 5700 = 57$

$$12.5 \quad 1.25 \quad 1.25 * 100 \quad 100$$

9. Exp: $\underline{34.31} * \underline{0.473} * \underline{1.567} = \underline{25.4303} = 2.15$

$$0.0673 * 23.25 * 7.57 \quad 11.845$$

10. Exp. Given Expression = $\underline{a^2 - b^2} = \underline{(a+b)(a-b)} = (a+b)$

$$\underline{a-b} \quad \underline{a-b}$$

$$\underline{(5.68)^2 - (4.32)^2} = (5.68 + 4.32) = 10$$

$$5.68 - 4.32$$

11. Exp: Given Expression = $\underline{a^3 + b^3} = (a+b)$

$$a^2 - ab + b^2$$

$$= (4.3 + 1) = 5.3$$

12. Exp: $\underline{5} \quad \underline{5} = \underline{5 * 2.24} = \underline{11.2} = \underline{11.2} = 14$

$$4 \quad 5-.96 \quad 4 * 2.24 -.96 \quad 8.96 -.96 \quad 8$$

13. Exp: $10^k = \underline{0.0551} = \underline{5.51} = \underline{5.51 * 10^2} = \underline{1} = 10^{-2}$

$$5.51 \quad 551 \quad 551 * 10^2 \quad 10^2$$

14. Exp: $\underline{25.25} = \underline{2525} = 0.012625$

$$2000 \quad 200000$$

15. Exp: $(2.502 + 0.064)^2 - (2.502 - 0.064)^2 = \underline{(a+b)^2 - (a-b)^2} = \underline{4ab} = 4$

$$2.502 * 0.064 \quad ab \quad ab$$

16. Exp: $\underline{4.5 * 1.8} + \underline{4.5 * 8.2} = \underline{4.5} (\underline{1.8} + \underline{8.2}) = \underline{4.5 * 10} = \underline{45} = 3$

$$1.5 * 4.5 + 1.5 * 5.5 \quad 1.5 (4.5 + 5.5) \quad 1.5 * 10 \quad 15$$

17. Exp: $(.02)^2 + (0.52)^2 + (0.035)^2 = \underline{a^2 + b^2 + c^2}$

$$(0.002)^2 + (0.052)^2 + (0.0035)^2 \quad (\underline{a}/\underline{10})^2 + (\underline{b}/\underline{10})^2 + (\underline{c}/\underline{10})^2,$$

where a= .02, b= .52, c= .035

$$= \underline{100(a^2+b^2+c^2)} = 100$$

$$a^2+b^2+c^2$$

18. Exp: Number of men donors = $200*1/4 = 50$

Number of women donors = $200-50=150$

1 man donor donates = Rs.3000

Therefore, 50 men donor donates = $3000* 50=$ Rs.1,50,000

1 woman donor donates = $3000*1/2 =$ Rs.1500

Therefore, 150 women donor donates = $1500* 150=$ Rs.2,25,000

Hence total amount collected = $1,50,000+ 2,25,000$

$$= \text{Rs.}3,75,000$$

19. Let the saving be Rs. x

Therefore, Expenditure = Rs. $(6300-x)$

$$\text{then, } (6300-x)* \underline{\frac{1}{5}} = x * \underline{\frac{1}{2}}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$$

$$\Rightarrow 1260 - \underline{x} = \underline{x}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$$

$$\Rightarrow 1260 = \underline{x} + \underline{x}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline 7 \end{array}$$

$$\Rightarrow \underline{7x} = 1260$$

$$\begin{array}{r} 10 \\ \times 7 \\ \hline 70 \end{array}$$

$$x = 1800$$

20. Exp: Let the length of the hall be x m

Breadth of the hall = $\underline{1x}$ m

$$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array}$$

Area of the hall = Length * Breadth

$$450 = x * \underline{\frac{1}{2}x}$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array}$$

$$x^2 = 900$$

$$x = 30$$

Difference between the length and breadth of the hall = $x - \frac{1}{2}x = \frac{x}{2}$

2

$\frac{30}{2} = 15\text{m}$

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