



RBI ASSISTANT 2023



MOST EXPECTED SIMPLIFICATION QUESTIONS PART-2

देखो, सीखो और सफल हो जाओ



MATHS

LIVE

01:00 PM



 94×96

$$\begin{array}{r} 94 \\ 96 \\ \hline 96-6=90 \quad | \quad 24 \\ \Rightarrow \underline{\underline{9024}} \end{array}$$

Diagram illustrating the calculation of 94×96 using the difference of squares method. The numbers 94 and 96 are shown with arrows pointing to 6 and 4 respectively. A curved arrow indicates the relationship between 6 and 4. Below, the calculation $96-6=90$ and 24 are shown, leading to the final result 9024 .

00:20

Question 1- 11.11% of 8100 + 23.23% of 9900 = ?

$$= \frac{1}{9} \times 8100 + \frac{23}{99} \times 9900$$

$$= 900 + 2300$$

$$= \underline{\underline{3200}}$$

A. 1230

B. 2300

C. 4100

~~D. 3200~~

E. None of these

Hint- $11\frac{1}{9}\% = 11.11\% = \frac{1}{9}$

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Question 2- $\sqrt[3]{421875} + 19.19\% \text{ of } 19800 + 45 \times 45$

$$\checkmark 7^3 = 343$$

$$8^3 = 512$$

$$= 75 + \frac{19}{99} \times 19800 + 2025$$

$$= 75 + 3800 + 2025$$

$$= 3800 + 2100$$

$$= \underline{\underline{5900}}$$

A. 9500

B. 4550

C. 2750

 D. 5900

E. None of these



Question 3- $5\frac{1}{4} + 3\frac{5}{6} = ? \cdot 7\frac{1}{3}$

✓ A. $16\frac{5}{12}$

B. $12\frac{1}{12}$

C. $\frac{11}{12}$

D. $\frac{11}{16}$

E. None of these

Question 3- $5\frac{1}{4} + 3\frac{5}{6} = ? \cdot 7\frac{1}{3}$

$$x = (5 + 3 + 7) + \left[\frac{1 \times 3}{4 \times 3} + \frac{5 \times 2}{6 \times 2} + \frac{1 \times 4}{3 \times 4} \right]$$

$$= 15 + \left[\frac{17}{12} \right]$$

$$= 15 + 1\frac{5}{12}$$

$$= 16\frac{5}{12}$$



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Question 4- 14.28% of 2800 + 42.84% of 1400 + 23.23% of 11500 = ?

प्रश्न 4- 2800 का 14.28% + 1400 का 42.84% + 11500 का 23.23% = ?

$$\begin{aligned}
 &= \frac{1}{7} \times 2800 + \frac{3}{7} \times 1400 + \frac{23}{99} \times 11500 \\
 &= 400 + 600 + \\
 &= 1000 + \text{Decimal}
 \end{aligned}$$

A. 2000

396

B. 1200

297

C. 1500

D. 2300

E. None of these

Hint- 12.5% = $\frac{1}{8}$



00:20

Question 5- 11.11% of 8100 + 22.22% of 7200 - 44.44% of 5400 = ?

प्रश्न 5- 8100 का 11.11% + 7200 का 22.22% - 5400 का 44.44% = ?

$$= \frac{1}{9} \times 8100 + \frac{2}{9} \times 7200 - \frac{4}{9} \times 5400$$

$$= 900 + 1600 - 2400$$

$$= \underline{\underline{100}}$$

- A. 200
- B. 100
- C. 300
- D. 400
- E. None of these

Hint- $11\frac{1}{9}\% = 11.11\% = \frac{1}{9}$



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Question 6- 9.09% of 3300 + 36.36% of 4400 + 45.45% of 2200 =?

प्रश्न 6- 3300 का 9.09% + 4400 का 36.36% + 2200 का 45.45% =?

$$= \frac{1}{11} \times \overset{300}{\cancel{3300}} + \frac{4}{11} \times \overset{400}{\cancel{4400}} + \frac{5}{11} \times \overset{200}{\cancel{2200}}$$

$$= \underline{\underline{2900}}$$

A. 1900

✓ B. 2900

C. 3900

D. 4900

E. None of these

Hint- $9\frac{1}{11}\% = 9.09\% = \frac{1}{11}$



00:20

Question 7- 12.5% of 51200 + 62.5% of 8000 - 37.5% of 1600 = ?

प्रश्न 7- 51200 का 12.5% + 8000 का 62.5% - 1600 का 37.5% = ?

$$\begin{aligned}
 &= \frac{1}{8} \times 51200 + \frac{5}{8} \times 8000 - \frac{3}{8} \times 1600 \\
 &= 6400 + 5000 - 600 \\
 &= \underline{\underline{10800}}
 \end{aligned}$$

A. 12800

B. 11800

C. 13800

D. 10800

E. None of these



$(40+3)(40-3)$

Question 8- $43 \times 37 + 99 \times 23 + 2560 \div 8 = ?$

$= \underline{\underline{1591}} + \underline{\underline{2277}} + \underline{\underline{0320}}$

$(100-1) \times 23$

2300	5000
- 23	1000
2277	180
	8
	4188

=

- A. 1188
- B. 2188
- C. 3388
- D. 4488
- E. 4188



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Question 9- $\{55 - (76 - 54 \div 9 \times 8)\} = ?$

$$\{55 - (76 - 48)\}$$

$$= 55 - 28$$

$$= \underline{\underline{27}}$$

A. 36

B. 63

C. 9

~~D. 27~~

E. None of these



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$$\sqrt{2197}$$

↓

13

~~Question 10- 30% of 140 + $\sqrt[3]{2197} - 4 = ?$~~

प्रश्न 10- 120 का 40% + $\sqrt[3]{1728} - 4 = ?$

$$= 42 + 13 - 4$$
$$= \underline{\underline{51}}$$

A. 6

B. 33

C. 24

 D. 51

E. None of these



00:20

Question 10- 30% of $140 + \sqrt[3]{2197} - 4 = ?$

प्रश्न 10- 120 का $40\% + \sqrt[3]{2197} - 4 = ?$

A. 6

B. 33

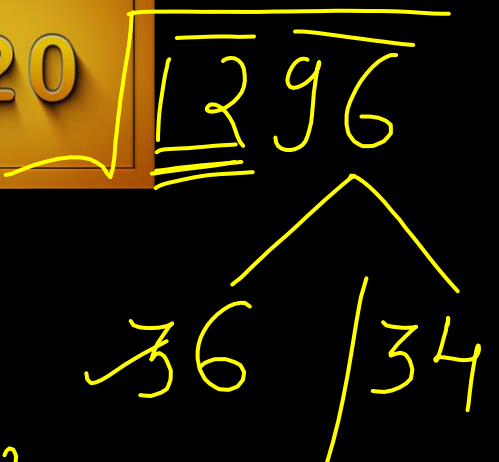
C. 24

D. 51

E. None of these

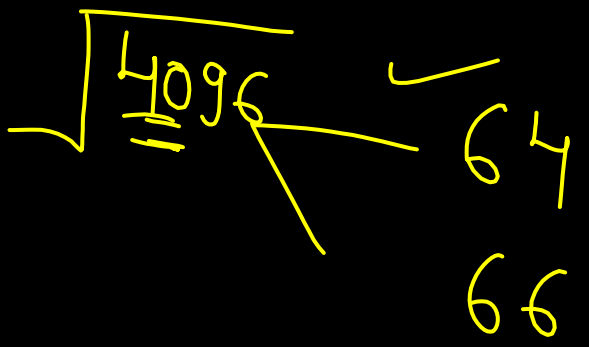


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$5^2 = 9$
 $4^2 = 16$

$3 \times 4 = 12$



Question 11- $\sqrt{1296} - \sqrt{2116} + \sqrt{4096} = ?$

$$= 36 - 46 + 64$$

$$= \underline{\underline{54}}$$

- A. 45
- B. 36
- C. 9
- D. 44
- E. None of these



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Question 12- $34 \times 24 \div 2 + 38 = ?$

$$= 408 + 38$$

$$= \underline{\underline{446}}$$

A. 05

B. 23

C. 32

D. 104

E. None of these



00:20

Question 13- $(\overset{60}{\cancel{360}} + \overset{8}{\cancel{48}}) \div 6 - 10 = ?$

$$= 68 - 10$$

$$= \underline{\underline{58}}$$

A. 49

B. 31

C. 13

D. 58

E. None of these



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Handwritten calculations for Question 14:

18000
1300
50
12

96

88

88 - 4 = 84 | 48

102

107

109 | 14

Question 14- $96 \times 88 + 102 \times 107 - 24800 \div 8 = ?$

$$= \underline{\underline{08}} \underline{\underline{448}} + \underline{\underline{10914}} - 3100$$

$$= 19362 - 3100$$

$$= 262$$

A. 145

B. 244

C. 343

D. 19062

 E. None of these



00:20

Question 15- $5^3 \times 125^2 \div 625 \times 25^3 = 5^?$

$$[5^3]^2$$

$$5^4 \Rightarrow 625$$

$$[5^2]^3 = 5^6$$

$$\frac{5^3 \times 5^6 \times 5^6}{5^4}$$

$$= \frac{5^{15}}{5^4}$$

$$\Rightarrow 5^{15-4}$$

$$\Rightarrow 5^{11} = 5^x$$

$$x = 11$$

- A. 12
- B. 13
- C. 14
- D. 11
- E. None of these



00:20

Question 16- $\underline{7}\underline{6}\underline{4}\underline{5} + \underline{3}\underline{1}\underline{8}\underline{8} + \underline{4}\underline{4}\underline{6}\underline{3} = ?$

$$\begin{array}{r} 14000 \\ 1100 \\ 180 \\ 16 \\ \hline 15296 \\ \hline \hline \end{array}$$

A. 25196

B. 1455

C. 15295

D. 21567

 E. None of these

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Question 17- $\sqrt{55 + \sqrt{64 + \sqrt{289}}} = X+20$

(Handwritten annotations: A bracket under 64 and 17 indicates their sum is 81. A bracket under 289 indicates its square root is 17.)

$$64 + 17 = 81$$

$$\sqrt{81}$$

$$x + 20 = \sqrt{64 + \sqrt{289}}$$

$$x = \underline{\underline{-12}}$$

A. -3

B. -30

 C. -12

D. -11

E. None of these



00:20

$$\begin{array}{r} 3 \\ 114 \times 6 \\ \hline 37 \end{array}$$

Question 18- $666 \times 37 + 4588 - 2346 = ?$

$$= 18 + 4588 - 2346$$

$$= 4606 - 2346$$

$$= 260$$

- A. 1160
- B. 1360
- C. 1460
- D. 4560
- E. None of these



00:20

Question 19- $\frac{4}{13}$ of ~~16900~~¹³⁰⁰ + $\frac{5}{17}$ of ~~1700~~¹⁰⁰ - 37.5% of 240 = ?

= 5200 + 500 - $\frac{3}{4} \times 240$

= 5700 - 90

= 5610

A. 1464

B. 1056

C. 5600

D. 5610

E. None of these

