1. $7 + 77 + 777 + 7777 = ?$

(A) 8638

(B) 86388

(C) 8538

(D) 8738

$$\begin{array}{r} 7 \\ 77 \\ 777 \\ 7777 \\ \hline 8638 \end{array}$$

II-method

$$1234 \times 7 = 8638$$

$4 + 44 + 444 + 4444 + 44444$

$$\begin{array}{r} 12345 \\ \times\ 4 \\ \hline 49380 \end{array}$$

$3 + 33 + 333 + 3333 + 33333 + 333333$

$$\begin{array}{r} 123456 \\ \times\ 3 \\ \hline 370368 \end{array}$$

① $0.2 + 0.22 + 0.222$

$$\begin{array}{r} 0.200 \\ 0.220 \\ 0.222 \\ \hline 0.642 \end{array}$$

② $0.3 + 0.33 + 0.333 + 0.3333$

$$\begin{array}{r} 0.3000 \\ 0.3300 \\ 0.3330 \\ 0.3333 \\ \hline 1.2963 \end{array}$$

① $0.2 + 0.22 + 0.222$

$$\begin{array}{r} 3\ 2\ 1 \\ \times 2 \\ \hline 0.642 \end{array}$$

② $0.3 + 0.33 + 0.333 + 0.3333$

$$\begin{array}{r} 4\ 3\ 2\ 1 \\ \times 3 \\ \hline 1.2963 \end{array}$$

③ $0.6 + 0.66 + 0.666 + 0.6666$

$$\begin{array}{r} 4\ 3\ 2\ 1 \\ \times 6 \\ \hline 2.5926 \end{array}$$

2. $9 + 99 + 999 + 9999 + 99999 = ?$

(A) 111105 (B) 111205

(C) 111405 (D) 121405

Fraction

① $\frac{17}{4} = 4\frac{1}{4} \longrightarrow 4 + \frac{1}{4}$

$4\frac{1}{4}$ → पूर्णांक (+)

$729 + \frac{117}{997}$

$= 729\frac{117}{997}$

$a = 3$

$b = 4$

$c = 5$

$3\frac{4}{5}$ तथा $a\frac{b}{c}$ में अंतर निकालें।

$3\frac{4}{5} - a\frac{b}{c}$

$3\frac{4}{5} - 3\frac{4}{5} = 0$

500% गलत

Fraction

① $\frac{17}{4} = 4\frac{1}{4} \longrightarrow 4 + \frac{1}{4}$

$4\frac{1}{4}$ → गुणांक (+)

ii) $a\frac{b}{c} = a + \frac{b}{c} \times$

$a\frac{b}{c}$ → (x)

$$a\frac{b}{c} = \frac{a \times b}{c}$$

$\frac{a \times b}{c}$

$$729 + \frac{117}{997}$$

$$= 729\frac{117}{997}$$

$a=3, b=4, c=5$

$3\frac{4}{5} - a\frac{b}{c}$

$\frac{19}{5} - \frac{a \times b}{c}$

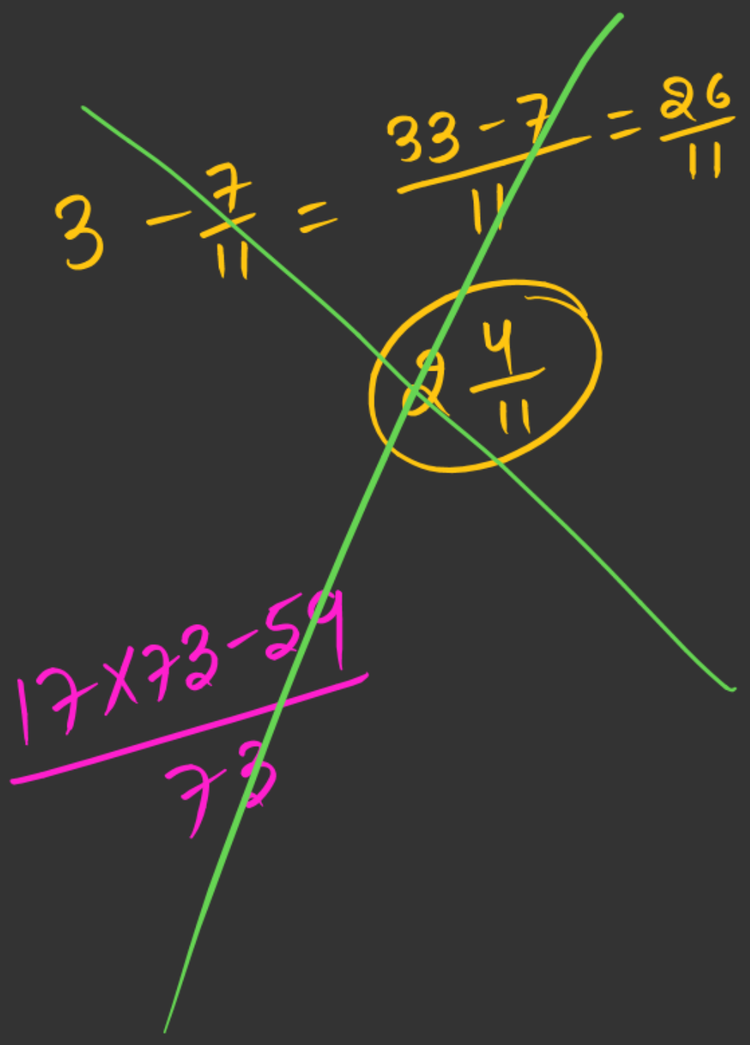
$\frac{19}{5} - \frac{3 \times 4}{5} = \frac{19}{5} - \frac{12}{5}$

$= \frac{7}{5}$

#

(i) $3 - \frac{7}{11} = 2\frac{4}{11}$

(ii) $17 - \frac{59}{73} = 16\frac{14}{73}$



$$928 - \frac{975}{999} = 927\frac{902}{999}$$

$$37527 - \frac{117}{997} = 37526\frac{880}{997}$$

$117 - \frac{69}{15}$

$117 - 4\frac{4}{15}$

$113 - \frac{4}{15} = 112\frac{11}{15}$

3. $15\frac{2}{7}+23\frac{3}{4}+7\frac{5}{7}+5\frac{1}{4}+9\frac{3}{8}=?$

(A) $61\frac{3}{8}$

(B) $60\frac{3}{8}$

(C) $61\frac{3}{4}$

(D) $56\frac{2}{7}$

4. $6\frac{3}{8} \times 6\frac{1}{8} \times 64\frac{2}{3} = ?$

(A) $2020\frac{1}{16}$

(B) $2525\frac{1}{16}$

(C) $2525\frac{1}{32}$

$\frac{17}{\cancel{51}_{8}} \times \frac{49}{\cancel{8}_{4}} \times \frac{\overset{97}{\cancel{194}}}{\cancel{3}}$

$\frac{17 \times 49 \times 97}{32}$ (1)

(D) $2020\frac{1}{32}$

BODMAS

O → of (का)

D M A S → $\div$ $\times$ $+$ $-$

B → [{ ($\overline{}$) }]

$\overline{}$ → रेखा कोष्ठ

① $3 \div 3 \div 3 \div 3 = 3 \times \frac{1}{3} \times \frac{1}{3} \times \frac{1}{3}$

$= \frac{1}{9}$

② $12 \div 2 \text{ of } 3 \times 5 =$

$12 \div 6 \times 5 = 10$ Ans

5. $3960 \div 44 \div 22 = ?$

(A) $3\frac{3}{5}$

(B) 1080

(C) 1980

(D) $4\frac{1}{11}$

$3960 \times \frac{1}{44} \times \frac{1}{22} = \frac{45}{11} = 4\frac{1}{11}$

(i) $\frac{p}{q} < 1$ उचित भिन्न

(ii) $\frac{p}{q} > 1$ अनुचित भिन्न

6. $(4)^2 + (3)^2 = \sqrt{x}$

(A) 5

(B) 125

(C) 25

(D) 625

$16 + 9 = \sqrt{x}$

$(25)^2 = (\sqrt{x})^2$

$625 = x$

Square and square root

वर्ग तथा वर्गमूल

$1^2 = 1$

$2^2 = 4$

$3^2 = 9$

$4^2 = 16$

$5^2 = 25$

$6^2 = 36$

$7^2 = 49$

$8^2 = 64$

$9^2 = 81$

$10^2 = 100$

2 | 3 | 7 | 8

वहीं होता

Note:→

(i)

(ii)

$(2D)^2$ → $2 \times 2 = 4D$

$2 \times 2 - 1 = 3D$

$(7D)^2$ → $14D$

$13D$

$(4D)^2$ → $4 \times 2 = 8D$

$4 \times 2 - 1 = 7D$

$(1-24)^2$ → last two digit

T	U
even	1
even	4
2	5
odd	6
even	9
0	0

iv) N^2 / 9 $R \to 1,0,4,7$