

Calculation का महानुक्रम बैच

Fraction

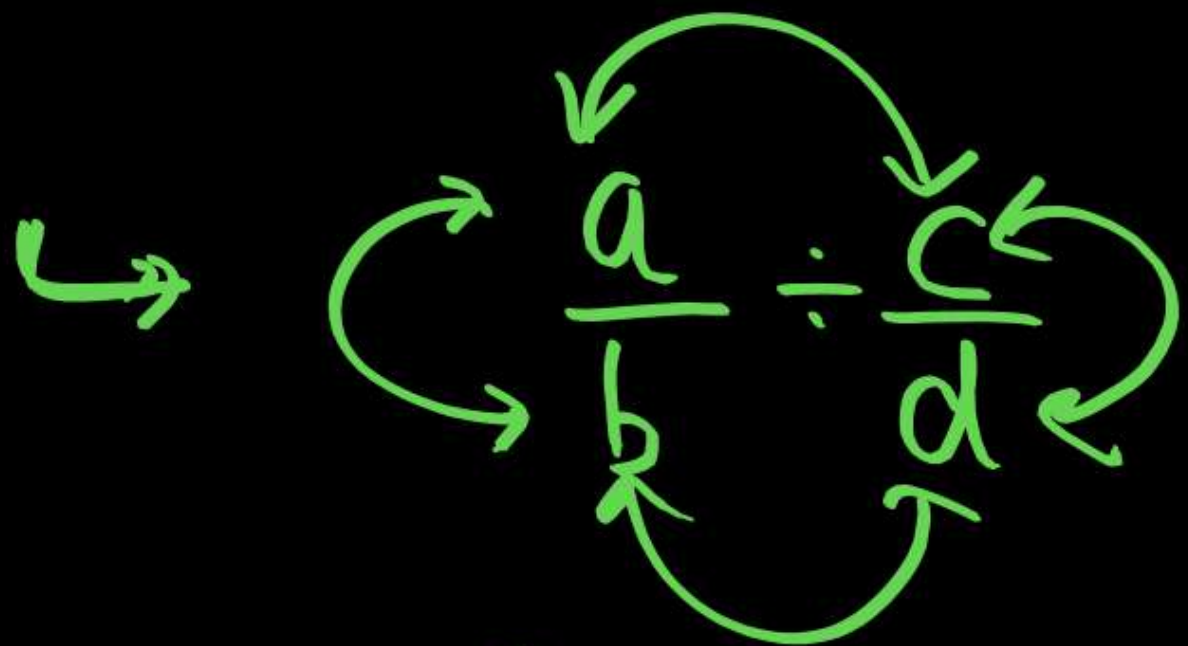
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-

x

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Fraction Division



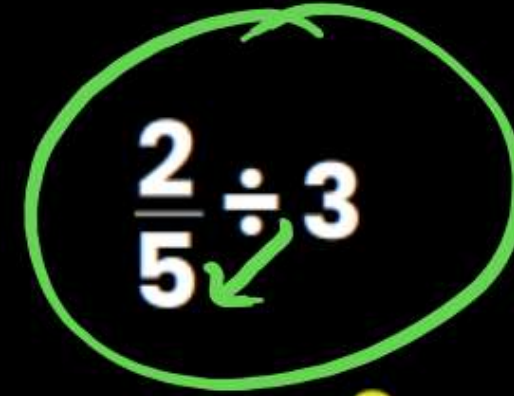
Step 2: Multiply the fractions:

$$\frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$$

Answer $\frac{ad}{bc}$

Fraction Division

Type-1


$$\frac{2}{5} \div 3$$

(a) $\frac{6}{5}$

✓ (b) $\frac{2}{15}$

(c) 7.5

(d) $\frac{2}{15}$

Ⓑ

$$\frac{2\cancel{8}}{9} \div \frac{3\cancel{12}}{3}$$

(a) $\frac{4}{27}$

✓ (b) $\frac{2}{27}$

(c) $\frac{32}{3}$

(d) 6

$$\frac{14}{5} \div 3$$


(a) $\frac{42}{5}$

(b) $\frac{2}{3}$

(c) $\frac{15}{14}$

~~(d)~~ $\frac{14}{15}$



$$\overset{12}{\cancel{24}} \div \cancel{2}$$

(a) $\frac{7}{12}$

$\checkmark$ (b) $1\frac{5}{7}$

(c) $1\frac{3}{7}$

(d) $6\frac{6}{7}$

$\frac{96}{13} \div 2$

(a) $\frac{21}{26}$

(b) $2\frac{4}{13}$

✓ (c) $3\frac{9}{13}$

(d) $5\frac{5}{13}$

$$\frac{127}{14} \div 5$$


(a) $2\frac{57}{70}$

(b) $\frac{7}{15}$

(c) 2.4

 (d) $1\frac{57}{70}$

✓ $\frac{16}{17} \div 4$

(a) $3\frac{13}{17}$

(b) $\frac{5}{17}$

✓ (c) $\frac{4}{17}$

(d) $2\frac{4}{17}$

$$\frac{17}{16} \div 3$$

✓ ~~(a)~~ $\frac{17}{48}$

(b) $2\frac{14}{17}$

(c) $\frac{14}{17}$

(d) $\frac{17}{42}$

$$\frac{114}{5} \div 10$$

(a) $2\frac{4}{15}$

(b) $5\frac{4}{20}$

✓ (c) $2\frac{7}{25}$

(d) $2\frac{6}{25}$

$$\frac{13}{4} \div 7$$

(a) $\frac{13}{64}$

(b) $5\frac{3}{13}$

(c) $\frac{13}{28}$

(d) $\frac{17}{52}$

$$\frac{17}{18} \div 3$$

✓ ~~(a)~~ $\frac{17}{54}$

(b) $4\frac{16}{17}$

(c) $\frac{7}{17}$

(d) $\frac{12}{17}$

$$\frac{100}{11} \div 7$$


(a) $\frac{33}{7}$

✓ (b) $1\frac{23}{77}$

(c) $1\frac{3}{8}$

(d) $\frac{4}{11}$

$$\overset{50}{\cancel{200}} \div \cancel{4}$$

(a) $\frac{800}{9}$

(b) $9\frac{5}{90}$

✓ (c) $5\frac{5}{9}$

(d) 200

$$\overset{15}{\cancel{300}} \div \cancel{20}$$

$$13$$

✓ ~~(a)~~ $1\frac{2}{13}$

(b) $\frac{13}{15}$

(c) 130

(d) $\frac{13}{30}$

$$\frac{150}{19} \div 10$$

(a) $\frac{15}{21}$

(b) $\frac{7}{19}$

✓ (c) $\frac{15}{19}$

(d) $\frac{19}{15}$

Type-2

$$\frac{9}{4} \div \frac{8}{13}$$


(a) $4\frac{21}{32}$

(b) $\frac{18}{13}$

 (c) $3\frac{21}{32}$

(d) 2

$$\frac{3}{7} \div \frac{2}{23}$$

~~(a)~~ $1\frac{20}{49}$

(b) $\frac{23}{12}$

(c) 46

(d) $\frac{84}{161}$

$$\frac{4}{5} \div \frac{13}{15}$$

(a) $\frac{13}{12}$

✓ (b) $\frac{12}{13}$

(c) 4.5

(d) $\frac{15}{13}$

$$\frac{1}{3} \div \frac{1}{4}$$

(a) $\frac{3}{4}$

(b) 12

(c) $\frac{1}{12}$

~~(d)~~ $1\frac{1}{3}$

$$\frac{33}{7} \div \frac{2}{5}$$


(a) $\frac{66}{35}$

(b) $11\frac{3}{7}$

 (c) $11\frac{11}{14}$

(d) $11\frac{1}{14}$

$$\frac{9}{4} \div \frac{13}{8}$$

(a) $\frac{5}{13}$

(b) $\frac{13}{18}$

✓ (c) $1\frac{5}{13}$

(d) $\frac{7}{8}$

$$\frac{200 \div 3}{3 \div 5}$$

(a) 360

~~(b)~~ $111\frac{1}{9}$

(c) $33\frac{4}{5}$

(d) $\frac{1}{30}$

$$\frac{16}{13} \div \frac{5}{7}$$


(a) 2

(b) $1\frac{47}{65}$



(c) $\frac{47}{65}$

(d) $\frac{65}{112}$

$$\frac{19}{7} \div \frac{4}{3}$$

(a) $\frac{21}{76}$

(b) $\frac{4}{19}$

(c) $2\frac{1}{28}$

(d) 2

$$\frac{71}{8} \div \frac{1}{11}$$

(a) $\frac{71}{88}$

(b) $\frac{11}{568}$

 (c) $97\frac{5}{8}$

(d) $\frac{8}{781}$

$$\frac{4}{5} \div \frac{13}{15}$$

(a) $\frac{13}{12}$

(b) $\frac{12}{13}$

(c) 4.5

(d) $\frac{15}{13}$

$$\frac{1}{3} \div \frac{1}{4}$$

(a) $\frac{3}{4}$

(b) 12

(c) $\frac{1}{12}$

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

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$$\frac{19}{7} \div \frac{4}{3}$$

(a) $\frac{21}{76}$

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(c) $2\frac{1}{28}$

(d) 2

$$\frac{71}{8} \div \frac{1}{11}$$

(a) $\frac{71}{88}$

(b) $\frac{11}{568}$

(c) $97\frac{5}{8}$

(d) $\frac{8}{781}$

$$\frac{5}{12} \div \frac{13}{14}$$

(a) 210

(b) ~~$\frac{35}{78}$~~

(c) $2\frac{8}{35}$

(d) $\frac{7}{6}$

$$\frac{25}{8} \div \frac{4}{3}$$

☒ (a) $2\frac{11}{32}$

(b) $\frac{25}{32}$

(c) $6\frac{9}{11}$

(d) 37.5

$$\frac{16}{17} \div \frac{4}{5}$$

(a) $\frac{17}{20}$

(b) $2\frac{6}{17}$

✓ (c) $1\frac{3}{17}$

(d) $\frac{17}{40}$

$$\frac{8}{9} \div \frac{12}{5}$$

(a) $\frac{20}{27}$

(b) $2\frac{7}{10}$

(c) $5\frac{2}{5}$

~~(d) $\frac{10}{27}$~~

$$\frac{114}{7} \div \frac{3}{2}$$

(a) $10\frac{5}{7}$

 (b) $10\frac{6}{7}$

(c) $11\frac{6}{7}$

(d) $\frac{7}{8}$

Advance Calculation

Chapter-2

Multiplication's Magic (गुणा के मैजिक)

- Arrow Method
- Cross Method (2×2)
- 0.5, 0.25, 0.75 और 0.125 की जबरदस्त Multiplication
- Multiplication of 5^n (5, 25, 125,)
- 50 का Special Multiplication
- 9, 99, 999, से गुणा (Multiplication)
- 101 का Multiplication Magic
- 1001 का Multiplication Magic
- Special Types of Multiplication
- Multiplication का Successive Method (बड़े काम की चीज)
- Exam Calculation के 4 मूलमंत्र

Type – 13 (When the last digit of both numbers is 5) how to multiply = ?

$$65 \times 45$$

$$6 \times 4 + \frac{6+4}{2} = 29$$

$$\boxed{29 \ 25}$$

Even Sum

$$\left(\text{Product} + \frac{\text{Sum}}{2} \right) 25$$

Type – 13 (When the last digit of both numbers is 5) how to multiply = ?

=


$$25 \times 85$$


$$2125$$

Type – 13 (When the last digit of both numbers is 5) how to multiply = ?

$$35 \times 65$$

$$6 \times 3 + \frac{6+3-1}{2}$$

$$2275$$

Odd Sum



$$\left(\text{Product} + \frac{\text{Sum}-1}{2} \right) 75$$

Type – 13 (When the last digit of both numbers is 5) how to multiply = ?

$$55 \times 85$$

$$\underline{4675}$$

$$\overbrace{75 \times 95}$$

$$\underline{7125}$$

$$\overbrace{35 \times 65}$$

$$\underline{2275}$$

Multiplication of Successive Method

$$P = A \times B$$

Product Same $= \left(\frac{n+1}{n} \right) \times \left(\frac{n}{n+1} \right)$

$$\uparrow \frac{1}{n} = \frac{1}{n+1} \downarrow$$

- Multiplication का Successive Method (बड़े काम की चीज)

75 × 384

$+25$ $+1/3$ -96 $-1/4$

$100 \times 288 = 28800$ Ans

$\uparrow \frac{1}{n} = \frac{1}{n+1} \downarrow$

- **Multiplication का Successive Method (बड़े काम की चीज)**
-

$$375 \times 112$$

$(+25) \quad \begin{array}{c} +1 \\ \hline 15 \end{array} \quad (-7) \quad \begin{array}{c} -1 \\ \hline 16 \end{array}$

$\downarrow \qquad \qquad \downarrow$

$$400 \times 105 = 42000$$

- **Multiplication का Successive Method (बड़े काम की चीज)**
-

$$36 \times 520$$

$$\begin{array}{cc} \textcircled{+4} & \textcircled{-8} \\ \downarrow & \downarrow \\ +\frac{1}{9} & -\frac{1}{10} \end{array}$$

$$40 \times 468 = 18720 \text{ Ans}$$

- Multiplication का Successive Method (बड़े काम की चीज)
-

$$825 \times 972$$

$$\begin{array}{c} \textcircled{+75} \left| +\frac{1}{11} \right. \quad \left. -81 \right| -\frac{1}{12} \\ \downarrow \qquad \qquad \downarrow \end{array}$$

$$900 \times 891 = 801900$$

- Multiplication का Successive Method (बड़े काम की चीज)

$$\begin{array}{r} 125 \\ \times 2125 \\ \hline 1 \end{array}$$

$$2125 \times 2214$$

$$\begin{array}{c} -125 \left| -\frac{1}{17} \right. \\ 13 \left| +\frac{1}{16} \right. \end{array}$$

$$2000$$

check

$A \times B$

$- \quad + \quad = \underline{\text{And Same}}$

Use of Approximation in this method

$$\frac{12}{88} \times \frac{1}{7}$$

$$88 \times 564$$

$$\begin{array}{c} \textcircled{+12} \quad \left| \begin{array}{c} +1 \\ 7 \end{array} \right. \quad \textcircled{-70} \quad \left| \begin{array}{c} -1 \\ 8 \end{array} \right. \\ \downarrow \qquad \qquad \downarrow \end{array}$$

$$100 \times 494 = 49400$$

311441
Ans

49632
Accurate

Use of Approximation in this method

$$123 \times 537$$

$$\begin{array}{cc} -23 & +134 \\ \left| \begin{array}{c} -1 \\ 5 \end{array} \right| & \left| \begin{array}{c} +134 \\ 4 \end{array} \right| \\ \downarrow & \downarrow \end{array}$$

$$100 \times 671 = \underline{\underline{67100}}$$

$$\underline{\underline{66051}}$$

Use of Approximation in this method

$$968 \times 472$$

$$\begin{array}{l} +32 \left| +\frac{1}{30} \right. \quad -15 \left| -\frac{1}{31} \right. \\ \downarrow \qquad \qquad \downarrow \\ 1000 \times 457 = 457000 \end{array}$$

Accurate

456896