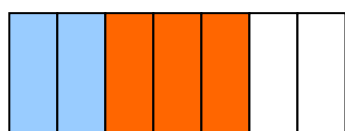
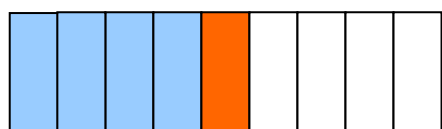


# Le quattro operazioni guidate con le frazioni

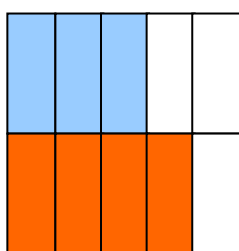
## SOMMA DI FRAZIONI CON UGUAL DENOMINATORE



$$\frac{2}{7} + \frac{3}{7} = \frac{2+3}{7} = \boxed{\frac{5}{7}}$$



$$\frac{4}{9} + \frac{1}{9} = \frac{4+1}{9} = \boxed{\frac{5}{9}}$$



$$\frac{3}{5} + \frac{4}{5} = \frac{3+4}{5} = \boxed{\frac{7}{5}}$$

### ORA PROVA TU:

$$\frac{3}{10} + \frac{7}{10} =$$

$$\frac{8}{3} + \frac{7}{3} =$$

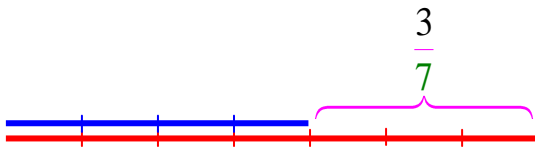
$$\frac{1}{2} + \frac{3}{2} + \frac{7}{2} =$$

$$\frac{3}{4} + \frac{5}{4} + \frac{9}{4} =$$

$$\frac{13}{2} + \frac{7}{2} =$$

$$\frac{1}{15} + \frac{11}{15} + \frac{9}{15} =$$

## SOTTRAZIONE DI FRAZIONI CON UGUAL DENOMINATORE



$$\frac{7}{7} - \frac{4}{7} = \frac{7-4}{7} = \boxed{\frac{3}{7}}$$

$$\frac{4}{9} - \frac{1}{9} = \frac{4-1}{9} = \frac{3}{9} = \boxed{\frac{1}{3}}$$

$$\frac{13}{5} - \frac{4}{5} = \frac{13-4}{5} = \boxed{\frac{9}{5}}$$

**ORA PROVA TU:**

$$\frac{15}{8} - \frac{7}{8} =$$

$$\frac{8}{3} - \frac{5}{3} =$$

$$\frac{23}{6} - \frac{13}{6} - \frac{1}{6} =$$

$$\frac{25}{14} - \frac{5}{14} - \frac{9}{14} =$$

$$\frac{16}{21} - \frac{5}{21} =$$

$$\frac{61}{15} - \frac{18}{15} - \frac{7}{15} =$$

## SOMMA DI FRAZIONI CON DENOMINATORE DIVERSO

ESEMPIO:  $\frac{2}{3} + \frac{5}{4}$

- CERCHI IL m.c.m. TRA I DENOMINATORI 3 e 4 = **12**
- DIVIDI **12** PER I DENOMINATORI E MOLTIPLICHI PER I NUMERATORI

$$12 : 3 \times 2 = 8 \qquad 12 : 4 \times 5 = 15$$

$$\frac{2}{3} + \frac{5}{4} = \frac{8+15}{12} = \frac{23}{12}$$

ESEMPIO:  $\frac{3}{2} + \frac{6}{5}$

m.c.m. tra 2 e 5 = **10**

$$10 : 2 \times 3 = 15 \qquad 10 : 5 \times 6 = 12$$

$$\frac{3}{2} + \frac{6}{5} = \frac{15+12}{10} = \frac{27}{10}$$

**ORA PROVA TU:**

ESERCIZIO:  $\frac{3}{4} + \frac{1}{2}$       m.c.m. tra 4 e 2 = ...

... : 4 × 3 = ...      ... : 2 × 1 = ...

$$\boxed{\frac{3}{4} + \frac{1}{2} = \frac{\dots + \dots}{\dots} = \frac{\dots}{\dots}}$$

ESERCIZIO:  $\frac{1}{4} + \frac{5}{2} + \frac{2}{3}$       m.c.m. tra 4; 2; 3 = ...

$$\boxed{\frac{1}{4} + \frac{5}{2} + \frac{2}{3} = \frac{\dots + \dots + \dots}{\dots} = \frac{\dots}{\dots}}$$

ESERCIZIO:  $2 + \frac{4}{3}$       m.c.m. tra 1 e 3 = ...

$$\boxed{2 + \frac{4}{3} = \frac{2}{1} + \frac{4}{3} = \frac{\dots + \dots}{\dots} = \frac{\dots}{\dots}}$$

## SOTTRAZIONE DI FRAZIONI CON DENOMINATORE DIVERSO

ESEMPIO:  $\frac{5}{2} - \frac{3}{4}$

- CERCHI IL m.c.m. TRA I DENOMINATORI 2 e 4 = 4
- DIVIDI 4 PER I DENOMINATORI E MOLTIPLICHI PER I NUMERATORI

$4 : 2 \times 5 = 10$        $4 : 4 \times 3 = 3$

$$\frac{5}{2} - \frac{3}{4} = \frac{10 - 3}{4} = \frac{7}{4}$$

ESEMPIO:  $\frac{7}{6} - \frac{3}{8}$

m.c.m. tra 6 e 8 = 24

$24 : 6 \times 7 = 28$        $24 : 8 \times 3 = 9$

$$\frac{7}{6} - \frac{3}{8} = \frac{28 - 9}{24} = \frac{19}{24}$$

**ORA PROVA TU:**

ESERCIZIO:  $\frac{7}{4} - \frac{2}{5}$       m.c.m. tra 4 e 5 = ...

... : 4 × 7 = ...      ... : 5 × 2 = ...

$$\frac{7}{4} - \frac{2}{5} = \frac{\dots - \dots}{\dots} = \frac{\dots}{\dots}$$

ESERCIZIO:  $\frac{10}{3} - \frac{1}{2} - \frac{2}{5}$       m.c.m. tra 3; 2; 5 = ...

$$\frac{10}{3} - \frac{1}{2} - \frac{2}{5} = \frac{\dots - \dots - \dots}{\dots} = \frac{\dots}{\dots}$$

ESERCIZIO:  $3 - \frac{4}{5}$       m.c.m. tra **1**; 5 = ...

$$3 - \frac{4}{5} = \frac{3}{1} - \frac{4}{5} = \frac{\dots + \dots}{\dots} = \frac{\dots}{\dots}$$

## MOLTIPLICAZIONE DI FRAZIONI

ESEMPIO:  $\frac{15}{4} \times \frac{2}{9} =$

$$\frac{15}{4} \times \frac{2}{9} = \frac{\overset{5}{\cancel{15}}}{\underset{2}{\cancel{4}}} \times \frac{\overset{1}{\cancel{2}}}{\underset{3}{\cancel{9}}} = \frac{5 \times 1}{2 \times 3} = \frac{5}{6}$$

ESEMPIO:  $\frac{3}{10} \times \frac{20}{9} =$

$$\frac{3}{10} \times \frac{20}{9} = \frac{\overset{1}{\cancel{3}}}{\underset{1}{\cancel{10}}} \times \frac{\overset{2}{\cancel{20}}}{\underset{3}{\cancel{9}}} = \frac{1 \times 2}{1 \times 3} = \frac{2}{3}$$

ESEMPIO:  $\frac{6}{7} \times \frac{5}{8} \times \frac{14}{5} =$

$$\frac{6}{7} \times \frac{5}{8} \times \frac{14}{5} = \frac{\overset{3}{\cancel{6}}}{\underset{1}{\cancel{7}}} \times \frac{\overset{1}{\cancel{5}}}{\underset{4}{\cancel{8}}} \times \frac{\overset{2}{\cancel{14}}}{\underset{1}{\cancel{5}}} = \frac{3 \times 1 \times 1}{1 \times 2 \times 1} = \frac{3}{2}$$

### ORA PROVA TU:

ESECIZIO:  $\frac{9}{4} \times \frac{2}{15} = \frac{\dots \cancel{9}}{\dots \cancel{4}} \times \frac{\cancel{2} \dots}{\cancel{15} \dots} = \frac{\dots \times \dots}{\dots \times \dots} = \frac{\dots}{\dots}$

ESECIZIO:  $\frac{12}{7} \times \frac{14}{6} \times \frac{3}{9} = \frac{\dots \cancel{12}}{\dots \cancel{7}} \times \frac{\cancel{14} \dots}{\cancel{6} \dots} \times \frac{\cancel{3} \dots}{\cancel{9} \dots} = \frac{\dots \times \dots \times \dots}{\dots \times \dots \times \dots} = \frac{\dots}{\dots}$

## DIVISIONE TRA FRAZIONI

IL SIMBOLO  $:$  DIVENTA  $\times$  E LA FRAZIONE CHE SEGUE DIVENTA L'INVERSA

ESEMPIO:  $\frac{25}{6} : \frac{5}{9} =$

$$\frac{25}{6} : \frac{5}{9} = \frac{25}{6} : \frac{5}{9} = \frac{25}{6} \times \frac{9}{5} = \dots \text{COME LA } \times \dots = \frac{\overset{5}{\cancel{25}}}{\underset{2}{\cancel{6}}} \times \frac{\overset{3}{\cancel{9}}}{\underset{1}{\cancel{5}}} = \frac{5 \times 3}{2 \times 1} = \frac{15}{2}$$

ESEMPIO:  $\frac{3}{8} : \frac{15}{4} =$

$$\frac{3}{8} : \frac{15}{4} = \frac{3}{8} \times \frac{4}{15} = \frac{\overset{1}{\cancel{3}}}{\underset{2}{\cancel{8}}} \times \frac{\overset{1}{\cancel{4}}}{\underset{5}{\cancel{15}}} = \frac{1 \times 1}{1 \times 5} = \frac{1}{5}$$

ESEMPIO:  $\frac{16}{7} : \frac{8}{3} : \frac{5}{14} =$

$$\frac{16}{7} : \frac{8}{3} : \frac{5}{14} = \frac{\overset{2}{\cancel{16}}}{\underset{1}{\cancel{7}}} \times \frac{\overset{3}{\cancel{3}}}{\underset{1}{\cancel{8}}} \times \frac{\overset{2}{\cancel{14}}}{\underset{5}{\cancel{5}}} = \frac{2 \times 3 \times 2}{1 \times 1 \times 5} = \frac{12}{5}$$

### ORA PROVA TU:

Esercizio:  $\frac{9}{14} : \frac{27}{7} = \frac{9}{14} \times \frac{\dots}{\dots} = \frac{\overset{\dots}{\cancel{9}}}{\dots} \times \frac{\dots}{\dots} = \frac{\dots \times \dots}{\dots \times \dots} = \frac{\dots}{\dots}$

Esercizio:  $\frac{7}{5} : \frac{6}{15} : \frac{7}{4} = \frac{\dots}{\dots} \times \frac{\dots}{\dots} \times \frac{\dots}{\dots} = \frac{\dots \times \dots \times \dots}{\dots \times \dots \times \dots} = \frac{\dots}{\dots}$