

Operazioni con le frazioni

somme e differenze						
1	$\frac{1}{5} + \frac{9}{5}$	R: 2	$\frac{22}{7} - \frac{1}{7}$	R: 3	$\frac{1}{6} + \frac{17}{6}$	R: 3
2	$\frac{17}{8} - \frac{1}{8}$	R: 2	$\frac{25}{6} + \frac{5}{6}$	R: 5	$\frac{11}{10} - \frac{1}{10}$	R: 1
3	$\frac{78}{11} - \frac{1}{11}$	R: 7	$\frac{46}{9} - \frac{1}{9}$	R: 5	$\frac{21}{4} - \frac{1}{4}$	R: 5
4	$\frac{21}{5} - \frac{7}{5}$	R: $\frac{14}{5}$	$\frac{31}{4} + \frac{3}{4}$	R: $\frac{17}{2}$	$\frac{2}{26} + \frac{11}{26}$	R: $\frac{1}{2}$
5	$8 - \frac{2}{7}$	R: $\frac{54}{7}$	$4 + \frac{2}{5}$	R: $\frac{22}{5}$	$4 - \frac{1}{3}$	R: $\frac{11}{3}$
6	$2 + \frac{8}{9}$	R: $\frac{26}{9}$	$7 - \frac{14}{3}$	R: $\frac{7}{3}$	$8 - \frac{34}{5}$	R: $\frac{6}{5}$
7	$\frac{17}{2} - 6;$	R: $\frac{5}{2}$	$5 + \frac{2}{3};$	R: $\frac{17}{3}$	$4 - \frac{11}{3}$	R: $\frac{1}{3}$
8	$\frac{6}{7} + \frac{12}{7} + \frac{10}{7}$	R: 4	$\frac{11}{13} + \frac{20}{13} + \frac{8}{13}$	R: 3	$\frac{18}{5} + \frac{8}{5} + \frac{4}{5}$	R: 6
9	$\frac{3}{2} + \frac{5}{2} - \frac{1}{2}$	R: $\frac{7}{2}$	$\frac{3}{2} + \frac{2}{5} - \frac{1}{10}$	R: $\frac{9}{5}$	$\frac{10}{9} - \frac{1}{2} + \frac{1}{18}$	R: $\frac{2}{3}$
10	$\frac{6}{5} + \frac{4}{15} - \frac{1}{3}$	R: $\frac{17}{15}$	$\frac{5}{21} - \frac{1}{7} + \frac{1}{3}$	R: $\frac{3}{7}$	$\frac{3}{7} - \frac{1}{5} + \frac{2}{35}$	R: $\frac{2}{7}$
11	$1 + \frac{29}{12} - \frac{3}{2}$	R: $\frac{23}{12}$	$\frac{3}{5} + 2 - \frac{7}{10}$	R: $\frac{19}{10}$	$3 - \frac{1}{4} - \frac{1}{8}$	R: $\frac{21}{8}$
12	$1,5 - \frac{1}{2} + 0,3\bar{3}$	R: $\frac{4}{3}$	$4 + \frac{1}{5} + 0,1$	R: $\frac{43}{10}$	$0,5\bar{5} + \frac{1}{3} - \frac{1}{4} + 0,3\bar{8}$	R: $\frac{37}{36}$
13	$\left(\frac{13}{12} + \frac{7}{15} - \frac{4}{5}\right) + 1 - \left(\frac{3}{10} + \frac{21}{8} - 2\right)$					R: $\frac{33}{40}$
14	$\frac{7}{6} - \left(\frac{5}{9} + \frac{1}{2}\right) + \frac{5}{2} + 3 - \left(2 - \frac{1}{6} + \frac{11}{8} + \frac{4}{3}\right)$					R: $\frac{77}{72}$
moltiplicazioni						
15	$\frac{1}{4} \times \frac{5}{7}$	R: $\frac{5}{28}$	$\frac{2}{3} \times \frac{4}{5}$	R: $\frac{8}{15}$	$\frac{1}{3} \times \frac{1}{2}$	R: $\frac{1}{6}$
16	$\frac{5}{3} \times \frac{15}{20}$	R: $\frac{5}{4}$	$\frac{11}{2} \times \frac{8}{33}$	R: $\frac{4}{3}$	$\frac{7}{12} \times \frac{4}{21}$	R: $\frac{1}{9}$
17	$\frac{7}{9} \times \frac{2}{3} \times \frac{6}{14}$					R: $\frac{2}{9}$
18	$\frac{4}{45} \times \frac{25}{18} \times \frac{9}{20}$					R: $\frac{1}{18}$
19	$\frac{33}{51} \times \frac{17}{11} \times \frac{1}{3}$					R: $\frac{1}{3}$

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20	$\frac{8}{90} \times \frac{810}{24} \times \frac{3}{45}$	R: $\frac{1}{5}$
21	$\frac{3}{5} \times \frac{125}{27} \times \frac{9}{25}$	R: 1
22	$\left(\frac{14}{15} - \frac{5}{6} + \frac{9}{10}\right) \times \frac{2}{5}$	R: $\frac{2}{5}$
23	$\left(\frac{7}{6} - \frac{3}{4} + \frac{1}{12}\right) \times \frac{3}{2}$	R: $\frac{3}{4}$
24	$\left(\frac{5}{8} + \frac{3}{4}\right) \times \left(\frac{6}{11} - \frac{13}{55}\right)$	R: $\frac{17}{40}$
25	$\left(\frac{5}{6} - \frac{8}{15}\right) \times \left(\frac{7}{45} - \frac{1}{9}\right)$	R: $\frac{1}{75}$
26	$\left(\frac{5}{6} - \frac{2}{7} + \frac{3}{14}\right) \times \left(\frac{19}{8} - \frac{3}{2}\right)$	R: $\frac{2}{3}$
27	$\left(\frac{5}{3} + \frac{15}{4}\right) \times 3 + \left(\frac{21}{4} - \frac{3}{2}\right) \times 3$	R: $\frac{55}{2}$
28	$\left(\frac{5}{18} - \frac{1}{5}\right) \times \frac{45}{2} - \left(\frac{5}{8} + \frac{7}{6}\right) \times \frac{27}{43}$	R: $\frac{5}{8}$
29	$0,8 - \frac{4}{7} \times \left(\frac{5}{4} + 0,25 \times 0,6 \times \frac{5}{4}\right) + \left(\frac{3}{4} - 0,2\right) \times 0,18 + \frac{1}{15} \times \frac{3}{2}$	R: $\frac{1}{6}$
30	$\left(\frac{24}{7} - 1 - \frac{5}{14}\right) \times \left(5 - \frac{11}{5}\right) - \frac{3}{11} \times \left(5 + \frac{1}{2}\right) - \left(4 - \frac{7}{2}\right)$	R: $\frac{19}{5}$

divisioni tra frazioni

31	$\frac{21}{4} : \frac{7}{16}$	R: 12	$6 : \frac{4}{9}$	R: $\frac{27}{2}$	$\frac{15}{11} : \frac{9}{7}$	R: $\frac{35}{33}$
32	$\frac{3}{2} : \frac{2}{3}$	R: $\frac{9}{4}$	$\frac{3}{7} : \frac{3}{7}$	R: 1	$\frac{8}{3} : 0$	R: priva di significato

33	$\frac{3}{4} : \frac{5}{2} + \frac{1}{10}$	R: $\frac{2}{5}$	$\frac{2}{3} : \frac{2}{3} + \frac{2}{3}$	R: $\frac{5}{3}$	$\frac{3}{2} : \frac{3}{2} \times \frac{3}{2}$	R: $\frac{3}{2}$
34	$\frac{2}{7} \times \frac{3}{5} : \frac{4}{11}$	R: $\frac{33}{70}$	$\frac{3}{5} \times \frac{5}{2} : \frac{9}{4}$	R: $\frac{2}{3}$	$2,5 : 0,5$	R: $\frac{9}{2}$

35	$1 - \frac{1}{6} : 2 - \frac{1}{4} : 2$	R: $\frac{19}{24}$
36	$3 - \frac{2}{3} : \frac{2}{3} + \frac{3}{2} : 3$	R: $\frac{5}{2}$
37	$\left(2 - \frac{19}{12}\right) : \frac{3}{20}$	R: $\frac{25}{9}$
38	$\left(\frac{5}{2} - \frac{10}{7}\right) : \frac{20}{21}$	R: $\frac{9}{8}$
39	$\frac{6}{5} + \frac{7}{3} : \frac{5}{9}$	R: $\frac{27}{5}$

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40	$\left(\frac{3}{5} + \frac{19}{50}\right) : \left(\frac{3}{2} - \frac{9}{20}\right)$	R: $\frac{14}{15}$
41	$\left(\frac{3}{7} - \frac{12}{35}\right) : \left(\frac{5}{3} - \frac{13}{21}\right)$	R: $\frac{9}{110}$
42	$\left(\frac{6}{7} - \frac{1}{4}\right) : \left(\frac{15}{28} + \frac{10}{21}\right)$	R: $\frac{3}{5}$
43	$\left(\frac{5}{13} + \frac{1}{3}\right) : \left(\frac{1}{2} + \frac{17}{78}\right)$	R: 1

potenze di frazioni

44	$\left(\frac{1}{3}\right)^2$	R: $\frac{1}{9}$	$\left(\frac{2}{3}\right)^2$	R: $\frac{4}{9}$	$\left(\frac{3}{5}\right)^0$	R: 1
45	$\left(\frac{2}{3}\right)^3$	R: $\frac{8}{27}$	$\left(\frac{1}{2}\right)^4$	R: $\frac{1}{16}$	$\left(\frac{3}{4}\right)^2$	R: $\frac{9}{16}$
46	$\left(\frac{2}{3} - \frac{1}{5}\right)^2$	R: $\frac{49}{225}$	$\left(\frac{1}{3} + \frac{1}{9}\right)^3$	R: $\frac{64}{729}$	$\left(\frac{3}{2}\right)^2 - \left(\frac{1}{5}\right)^2$	R: $\frac{221}{100}$
47	$\left(2 - \frac{1}{2}\right)^3$	R: $\frac{27}{8}$	$\left(5 - \frac{3}{2}\right)^2$	R: $\frac{49}{4}$	$\left(\frac{1}{2}\right)^2 - \left(\frac{1}{2}\right)^3$	R: $\frac{1}{8}$
48	$\left(\frac{3}{7}\right)^6 : \left(\frac{3}{7}\right)^3$	R: $\frac{27}{343}$	$\left(\frac{2}{3}\right)^3 \cdot \left(\frac{6}{5}\right)^3$	R: $\frac{64}{125}$	$\left(\frac{3}{7}\right)^0 \cdot \left(\frac{3}{7}\right)^3$	R: $\frac{27}{343}$
49	$\left(\frac{1}{2}\right)^5 \cdot \left(\frac{1}{2}\right)^2 : \left(\frac{1}{2}\right)^2$	R: $\frac{1}{32}$	$\left[\left(\frac{1}{6}\right)^2\right]^3$	R: $\frac{1}{6^6}$	$\left[\frac{1}{2} \cdot \left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^3\right]^5$	R: $\frac{1}{2^{30}}$

esercizi di riepilogo

50	$\left\{ \left[\frac{5}{2} + \left(\frac{1}{8} + \frac{7}{8} + \frac{3}{4} \right) \cdot \left(\frac{13}{5} + \frac{2}{15} - \frac{7}{30} \right) \cdot \frac{8}{5} \right] \left(\frac{2}{5} - \frac{1}{30} - \frac{1}{15} \right) : 19 \right\} : \frac{19}{2}$	R: $\frac{3}{190}$
51	$\frac{1}{6} \cdot \left\{ \frac{3}{4} : \left[\frac{4}{9} \left(\frac{5}{8} + \frac{3}{2} - \frac{7}{4} \right) \right] - \frac{3}{2} \right\} + \frac{4}{5}$	R: $\frac{13}{10}$
52	$\left(\frac{2}{3} + \frac{1}{2} - 4 \times \frac{1}{8} \right) : \left(\frac{1}{5} - \frac{8}{5} \times \frac{1}{16} \right) + \left[\frac{2}{5} : \left(\frac{9}{7} : \frac{3}{7} \right) + \frac{1}{5} \right]$	R: 7
53	$\left\{ \left[\left(\frac{1}{2} - \frac{1}{30} \right) : \frac{7}{15} + \left(\frac{2}{5} - \frac{1}{10} \right) \left(\frac{5}{6} + \frac{1}{3} \right) \right] \cdot \frac{5}{3} + \frac{1}{5} \right\} : \frac{7}{4}$	R: $\frac{31}{21}$
54	$\left[\left(\frac{1}{4} + 1 - \frac{2}{3} \right)^2 : \frac{7}{6} + \frac{6}{5} \cdot \left(\frac{1}{2} - \frac{1}{3} \right)^2 \right] : \left(\frac{3}{4} \right)^2 - \left(\frac{2}{3} \right)^2$	R: $\frac{2}{15}$
55	$\frac{1}{6} - \left\{ \left[\left(1 - \frac{1}{3} - \frac{1}{2} \right) - \left(2 - \frac{4}{3} - \frac{1}{2} \right)^2 \cdot \left(\frac{4}{5} + 4 \right) \right] \right\} : \frac{2}{3}$	R: $\frac{7}{60}$
56	$\frac{\left(\frac{1}{3} + 1\right)\left(1 - \frac{1}{3}\right)}{\left(1 + \frac{1}{3}\right) \cdot \left(\frac{5}{4} - \frac{1}{2}\right)}$	R: $\frac{8}{9}$
57	$\left[\frac{\left(\frac{1}{3} + 1\right) : \left(2 - \frac{1}{3}\right) + \left(2 - \frac{1}{4}\right)}{2 - \frac{15}{11} \cdot \left(\frac{2}{5} + \frac{1}{3}\right)} \right] : \frac{51}{5}$	R: $\frac{1}{4}$

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58	$\frac{\left[\frac{7}{2} : 3 \cdot \frac{3}{14} + \left(\frac{7}{2} : 2\right) \cdot \left(\frac{2}{7} : 3\right)\right]^2 : \frac{5}{12}}{\left(\frac{1}{9} + \frac{4}{15} \cdot \frac{10}{8}\right)^2 : \left(\frac{2}{3}\right)^3}$	R: $\frac{5}{8}$
59	$\left\{\left[\frac{17}{12} : \left(\frac{5}{4} - \frac{2}{3}\right)\right] : \left(\frac{13}{12} + \frac{1}{3}\right)\right\}^2 \left[\left(\frac{13}{12}\right)^3 \cdot \left(\frac{13}{12}\right)^0\right] : \left(\frac{10}{7}\right)^2$	R: $\frac{36}{25}$
60	$\left[\left(\frac{1}{2} - \frac{1}{3}\right)^4 : \left(\frac{1}{2} + \frac{1}{3}\right)^4\right] \cdot \left[\left(\frac{3}{5} - 2\right)^4 : \left(1 - \frac{2}{5}\right)^4\right] \cdot \left[\left(5 - \frac{5}{7}\right) : 2\right]^4$	R: 30
61	$\left[\left(\frac{3}{7}\right)^4\right]^2 : \left[\left(\frac{3}{7}\right)^3\right]^2 \cdot \left\{\left[\left(\frac{3}{7}\right)^4\right]^3 : \left[\left(\frac{3}{7}\right)^2\right]^6\right\} \cdot \left(\frac{3}{7}\right)^0$	R: $\frac{9}{49}$
62	$\left[\left(\frac{2}{3}\right)^2 + \frac{11}{9}\right] \cdot \left[\left(\frac{5}{3}\right)^4 \cdot \left(\frac{5}{3}\right)^3\right] : \left[\left(\frac{5}{3}\right)^2 \cdot \left(\frac{5}{3}\right)^3\right] : \left[\left(\frac{3}{2}\right)^2 - \frac{7}{12}\right]$	R: $\frac{25}{9}$
63	$\left\{\left[\left(\frac{4}{7}\right)^2\right]^3\right\}^4 : \left[\left(\frac{4}{7}\right)^6\right]^2 \cdot \left\{\left[\left(\frac{5}{2}\right)^2\right]^3\right\}^2 : \left[\left(\frac{5}{7}\right)^2 \cdot \left(\frac{5}{7}\right)^4 \cdot \left(\frac{5}{7}\right)^6\right]$	R: 2^{12}
64	$\frac{1}{5} + \frac{7}{5} : \left\{\frac{2}{5} + \left(\frac{3}{16}\right)^2 : \left[\frac{3^2}{4^2} + \left(\frac{3}{5} + \frac{2}{15} - \frac{1}{3}\right)^2 : \left(1 - \frac{3}{5}\right)^2 - \frac{11}{8}\right]^2\right\}$	R: $\frac{6}{5}$