Espressioni con le quattro operazioni. Livello base. Completi di soluzione guidata.
Evaluating Expressions Involving Fractions – With solutions

1. $1+\frac{2}{3}\cdot\frac{1}{2}-\frac{1}{2}:\frac{3}{4}-\frac{1}{4}$ $\left[\frac{5}{12}\right]$ soluzione

2. $\frac{17}{3}\cdot\frac{1}{17}+7\cdot\frac{1}{14}$ $\left[\frac{5}{6}\right]$ soluzione

3. $\left[\left(\frac{1}{3}:\frac{6}{5}\right):\frac{1}{3}+\frac{1}{9}\right]:\frac{1}{3}+\frac{5}{6}$ $\left[\frac{11}{3}\right]$ soluzione

4. $\left[\left(\frac{1}{3}:\frac{6}{5}\right)\cdot\frac{1}{3}+\frac{1}{9}\right]:\frac{1}{9}+\frac{5}{6}$ $\left[\frac{8}{3}\right]$ soluzione

5. $\left[\left(\frac{1}{3}:6\right):\frac{1}{3}+\frac{1}{9}\right]:\frac{1}{3}-\frac{5}{6}+\frac{1}{2}$ $\left[\frac{1}{2}\right]$ soluzione

6. $\frac{9}{4}-\frac{16}{9}\cdot\frac{5}{6}:\left(1+\frac{1}{9}\right)+\frac{3}{8}-\frac{1}{24}$ $\left[\frac{5}{4}\right]$ soluzione

7. $1+\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\left(2-\frac{3}{4}\right)$ $\left[\frac{17}{12}\right]$ soluzione

8. $1-\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\left(2-\frac{5}{4}\right)$ $\left[\frac{7}{12}\right]$ soluzione

9. $\frac{3}{4}-\left(\frac{4}{3}+\frac{5}{2}\right)\cdot\frac{9}{46}$ [0] soluzione

10. $\frac{5}{3}-\left(\frac{7}{2}-\frac{4}{5}\right)\cdot\left(\frac{1}{3}+\frac{2}{9}\right)$ $\left[\frac{1}{6}\right]$ soluzione

11. $\left(3+\frac{1}{2}\right)\cdot\left(\frac{2}{3}-\frac{1}{3}-\frac{1}{7}\right)+\frac{1}{3}$ [1] soluzione

12. $\frac{1}{2}+\left[\left(\frac{1}{2}+\frac{1}{3}\right)\cdot\frac{4}{5}+\frac{1}{2}\right]\cdot\frac{4}{7}-\frac{1}{3}$ $\left[\frac{5}{6}\right]$ soluzione

13. $\left\{\frac{1}{2}+\left[\left(\frac{1}{2}+\frac{1}{3}\right)\cdot\frac{4}{5}+\frac{1}{2}\right]\right\}\cdot\frac{4}{5}-\frac{1}{2}$ $\left[\frac{5}{6}\right]$ soluzione

14. $\frac{1}{8}+\left(\frac{3}{14}+\frac{3}{7}\right)\cdot\frac{7}{12}$ $\left[\frac{1}{2}\right]$ soluzione

15. $\left(\frac{6}{7}-\frac{24}{35}\right):\left(\frac{1}{7}+\frac{1}{14}\right)\cdot\frac{5}{2}$ [2] soluzione

16. $\frac{5}{11}\cdot\left[1+\left(1-\frac{1}{12}\cdot\frac{21}{5}\right)\right]\cdot\frac{8}{10}-\frac{1}{2}$ $\left[\frac{1}{10}\right]$ soluzione

17. $1-\left[\left(\frac{3}{5}+\frac{2}{3}:\frac{4}{3}\right)\cdot\frac{10}{3}-2\right]:\left(1+\frac{2}{3}\right)$ [0] soluzione

18. $\left(\frac{1}{4}\cdot\frac{5}{2}-\frac{3}{2}\cdot\frac{1}{4}\right)\cdot\left(\frac{6}{3}\cdot\frac{5}{4}+1\right):\left(\frac{6}{10}\cdot\frac{5}{2}+1\right)$ $\left[\frac{7}{20}\right]$ soluzione

19. $\left(\frac{1}{7}-\frac{1}{14}\right):\left[\left(\frac{1}{5}:\frac{7}{3}+\frac{1}{7}\right)\cdot\left(\frac{3}{16}+\frac{1}{8}\right)\right]$ [1] soluzione

20. $\left\{\left[\left(\frac{3}{4}-\frac{2}{5}\right)\cdot\frac{8}{7}+\left(1-\frac{1}{2}\right)\right]:\frac{3}{5}\right\}:\left(1+\frac{1}{2}\right)+2$ [3] soluzione

21. $\left[\left(\frac{2}{4}-\frac{1}{3}\right)\cdot\frac{3}{2}+\left(\frac{2}{6}-\frac{1}{4}\right)\cdot\left(1-\frac{2}{5}\right)\right]:\frac{6}{20}+1$ [2] soluzione

22. $\left\{\left[27:\left(1+\frac{3}{4}+\frac{3}{4}\cdot\frac{2}{3}\right)\right]\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}$ [6] soluzione

Soluzioni

$$1+\frac{2}{3}\cdot\frac{1}{2}-\frac{1}{2}:\frac{3}{4}-\frac{1}{4}$$

Semplifico la moltiplicazione in croce il 2 e il 2 in 1 e 1, dividendo per 2.

$$=1+\frac{^{2}\cancel{2}}{3}\cdot\frac{1}{\cancel{2}_{1}}-\frac{1}{2}:\frac{3}{4}-\frac{1}{4}=$$

Trasformo la divisione in una moltiplicazione per il reciproco del divisore.

Semplifico la moltiplicazione in croce, il 4 e il 2 in 2 e 1 (M.C.D.(2, 4)=2).

$$=1+\frac{1}{3}-\frac{1}{_{1}\cancel{2}}\cdot\frac{\cancel{4}^{2}}{3}-\frac{1}{4}=$$

$$=\frac{1}{1}+\frac{1}{3}-\frac{2}{3}-\frac{1}{4}=$$

Cerco il m.c.m.(1, 3, 4)=12.

Applico l'algoritmo di calcolo per la somma e differenza di frazioni.

$$=\frac{12+4-8-3}{12}=\frac{5}{12}$$

$$\frac{17}{3}\cdot\frac{1}{17}+7\cdot\frac{1}{14}$$

$$=\frac{^{1}\cancel{17}}{3}\cdot\frac{1}{\cancel{17}_{1}}+\ ^{1}\cancel{7}\cdot\frac{1}{\cancel{14}_{2}}=$$

Semplifico la prima moltiplicazione in croce il 17 e il 17 in 1 e 1.

Semplifico la seconda moltiplicazione in croce il 7 e il 14 in 1 e 2 (M.C.D.(7, 14)=2).

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

Cerco il m.c.m.(3, 2)=6.

Applico l'algoritmo di calcolo per la somma e differenza di frazioni.

$$=\frac{3+2}{6}=\frac{5}{6}$$

$$\left[\left(\frac{1}{3}:\frac{6}{5}\right):\frac{1}{3}+\frac{1}{9}\right]:\frac{1}{3}+\frac{5}{6}=$$

Trasformo le divisioni in moltiplicazioni per il reciproco del divisore.

$$=\left[\left(\frac{1}{3}\cdot\frac{5}{6}\right)\cdot\frac{3}{1}+\frac{1}{9}\right]\cdot\frac{3}{1}+\frac{5}{6}=$$

Non essendo possibile semplificare "in croce" trovo il numeratore come prodotto dei numeratori e il denominatore come prodotto dei denominatori.

$$=\left[\frac{5}{18}\cdot\frac{3}{1}+\frac{1}{9}\right]\cdot\frac{3}{1}+\frac{5}{6}=$$

Semplifico la moltiplicazione in croce il 3 e il 18 in 1 e 6 (M.C.D.(3, 18)=3).

$$=\left[\frac{5}{6}+\frac{1}{9}\right]\cdot\frac{3}{1}+\frac{5}{6}=$$

Cerco il m.c.m.(6, 9)=18.

Applico l'algoritmo di calcolo per la somma e differenza di frazioni.

$$=\frac{15+2}{18}\cdot\frac{3}{1}+\frac{5}{6}=$$

Semplifico la moltiplicazione in croce il 3 e il 18 in 1 e 6 (M.C.D.(3, 18)=3).

$$=\frac{17}{{}_{6}\cancel{18}}\cdot\frac{\cancel{3}^{1}}{1}+\frac{5}{6}=$$

$$=\frac{17}{6}+\frac{5}{6}=$$

Applico l'algoritmo di calcolo per la somma e differenza di frazioni con lo stesso numeratore.

$$=\frac{17+5}{6}=\frac{22}{6}$$

La frazione è riducibile (M.C.D.(22, 6)=2).

$$=\frac{11}{3}$$

grazie a Giulia C. per la segnalazione 5/7/2010

$$\left[\left(\frac{1}{3}:\frac{6}{5}\right)\cdot\frac{1}{3}+\frac{1}{9}\right]:\frac{1}{9}+\frac{5}{6}=$$

Trasformo le divisioni in moltiplicazioni per il reciproco del divisore.

$$=\left[\left(\frac{1}{3}\cdot\frac{5}{6}\right)\cdot\frac{1}{3}+\frac{1}{9}\right]\cdot\frac{9}{1}+\frac{5}{6}=$$

Non essendo possibile semplificare "in croce" trovo il numeratore come prodotto dei numeratori e il denominatore come prodotto dei denominatori.

$$=\left[\frac{5}{18}\cdot\frac{1}{3}+\frac{1}{9}\right]\cdot 9+\frac{5}{6}=$$

$$=\left[\frac{5}{54}+\frac{1}{9}\right]\cdot 9+\frac{5}{6}=$$

Cerco il m.c.m.(9, 54)=54.

Applico l'algoritmo di calcolo per la somma e differenza di frazioni.

$$=\left[\frac{5+6}{54}\right]\cdot 9+\frac{5}{6}=$$

$$=\frac{11}{54}\cdot 9+\frac{5}{6}=$$

Semplifico la moltiplicazione in croce il 9 e il 54 in 1 e 6 (M.C.D.(9, 54)=9).

$$=\frac{11}{6}+\frac{5}{6}=$$

Applico l'algoritmo di calcolo per la somma e differenza di frazioni con lo stesso numeratore.

$$=\frac{11+5}{6}=$$

$$=\frac{16}{6}=$$

La frazione è riducibile (M.C.D.(16, 6)=2).

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

$$\left[\left(\frac{1}{3}:6\right):\frac{1}{3}+\frac{1}{9}\right]:\frac{1}{3}-\frac{5}{6}+\frac{1}{2}=$$

Trasformo le divisioni in moltiplicazioni per il reciproco del divisore.

$$=\left[\left(\frac{1}{3}\cdot\frac{1}{6}\right)\cdot\frac{3}{1}+\frac{1}{9}\right]\cdot\frac{3}{1}-\frac{5}{6}+\frac{1}{2}=$$

Non essendo possibile semplificare “in croce” eseguo trovo il numeratore come prodotto dei numeratori e il denominatore come prodotto dei denominatori.

$$=\left[\frac{1}{6}+\frac{1}{9}\right]\cdot\frac{3}{1}-\frac{5}{6}+\frac{1}{2}=$$

Cerco il m.c.m.(6, 9)=18.

Applico l’algoritmo di calcolo per la somma e differenza di frazioni.

$$=\left[\frac{3+2}{18}\right]\cdot\frac{3}{1}-\frac{5}{6}+\frac{1}{2}=$$

$$=\frac{5}{18}\cdot\frac{3}{1}-\frac{5}{6}+\frac{1}{2}=$$

Semplifico la moltiplicazione in croce il 3 e il 18 in 1 e 6 (M.C.D.(3, 18)=3).

$$=\frac{5}{6}-\frac{5}{6}+\frac{1}{2}=$$

Le differenza tra due frazioni uguali è 0 e posso non tenerne conto.

$$=\frac{1}{2}$$

$$\frac{9}{4}-\frac{16}{9}\cdot\frac{5}{6}:\left(1+\frac{1}{9}\right)+\frac{3}{8}-\frac{1}{24}=$$
$$=\frac{9}{4}-\frac{8}{9}\cdot\frac{5}{3}:\left(\frac{9+1}{9}\right)+\frac{3}{8}-\frac{1}{24}=$$
$$=\frac{9}{4}-\frac{8}{9}\cdot\frac{5}{3}\cdot\frac{9}{10}+\frac{3}{8}-\frac{1}{24}=$$
$$=\frac{9}{4}-\frac{8}{1}\cdot\frac{1}{3}\cdot\frac{1}{2}+\frac{3}{8}-\frac{1}{24}=$$
$$=\frac{9}{4}-\frac{4}{3}+\frac{3}{8}-\frac{1}{24}=$$
$$=\frac{54-32+9-1}{24}=$$
$$=\frac{30}{24}=\frac{5}{4}$$

$$1+\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\left(2-\frac{3}{4}\right)=$$
$$=1+\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\left(\frac{8-3}{4}\right)=$$
$$=1+\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\frac{5}{4}=$$
$$=1+\frac{1}{2}+\frac{1}{3}-\frac{5}{12}=$$
$$=\frac{12+6+4-5}{12}=\frac{17}{12}$$

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$$1-\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\left(2-\frac{5}{4}\right)=$$
$$=1-\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\left(\frac{8-5}{4}\right)=$$
$$=1-\frac{1}{2}+\frac{1}{3}-\frac{1}{3}\cdot\frac{3}{4}=$$
$$=1-\frac{1}{2}+\frac{1}{3}-\frac{1}{4}=$$
$$=\frac{12-6+4-3}{12}=\frac{7}{12}$$

$$\frac{3}{4}-\left(\frac{4}{3}+\frac{5}{2}\right)\cdot\frac{9}{46}=$$
$$=\frac{3}{4}-\frac{8+15}{6}\cdot\frac{9}{46}=$$
$$=\frac{3}{4}-\frac{23}{6}\cdot\frac{9}{46}=$$
$$=\frac{3}{4}-\frac{1}{2}\cdot\frac{3}{2}=$$
$$=\frac{3}{4}-\frac{3}{4}=0$$

$$\frac{5}{3}-\left(\frac{7}{2}-\frac{4}{5}\right)\cdot\left(\frac{1}{3}+\frac{2}{9}\right)=$$
$$=\frac{5}{3}-\frac{35-8}{10}\cdot\frac{3+2}{9}=$$
$$=\frac{5}{3}-\frac{27}{10}\cdot\frac{5}{9}=$$
$$=\frac{5}{3}-\frac{3}{2}=$$
$$=\frac{10-9}{6}=\frac{1}{6}$$

$$\left(3+\frac{1}{2}\right)\cdot\left(\frac{2}{3}-\frac{1}{3}-\frac{1}{7}\right)+\frac{1}{3}=$$
$$=\frac{6+1}{2}\cdot\frac{14-7-3}{21}+\frac{1}{3}=$$
$$=\frac{7}{2}\cdot\frac{4}{21}+\frac{1}{3}=$$
$$=\frac{2}{3}+\frac{1}{3}=\frac{3}{3}=1$$

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

$$\left\{\frac{1}{2}+\left[\left(\frac{1}{2}+\frac{1}{3}\right)\cdot\frac{4}{5}+\frac{1}{2}\right]\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\left\{\frac{1}{2}+\left[\frac{3+2}{6}\cdot\frac{4}{5}+\frac{1}{2}\right]\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\left\{\frac{1}{2}+\left[\frac{5}{6}\cdot\frac{4}{5}+\frac{1}{2}\right]\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\left\{\frac{1}{2}+\left[\frac{2}{3}+\frac{1}{2}\right]\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\left\{\frac{1}{2}+\frac{4+3}{6}\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\left\{\frac{1}{2}+\frac{7}{6}\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\left\{\frac{1}{2}+\frac{7}{6}\right\}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\frac{3+7}{6}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\frac{10}{6}\cdot\frac{4}{5}-\frac{1}{2}=$$

$$=\frac{4}{3}-\frac{1}{2}=$$

$$=\frac{8-3}{6}=\frac{5}{6}$$

$$\frac{1}{8}+\left(\frac{3}{14}+\frac{3}{7}\right)\cdot\frac{7}{12}=$$
$$=\frac{1}{8}+\left(\frac{3+6}{14}\right)\cdot\frac{7}{12}=$$
$$=\frac{1}{8}+\frac{9}{14}\cdot\frac{7}{12}=$$
$$=\frac{1}{8}+\frac{9}{2}\cdot\frac{1}{12}=$$
$$=\frac{1}{8}+\frac{3}{2}\cdot\frac{1}{4}=$$
$$=\frac{1}{8}+\frac{3}{8}=$$
$$=\frac{4}{8}=\frac{1}{2}$$

$$\left(\frac{6}{7}-\frac{24}{35}\right):\left(\frac{1}{7}+\frac{1}{14}\right)\cdot\frac{5}{2}$$
$$=\left(\frac{30-24}{35}\right):\left(\frac{1}{7}+\frac{1}{14}\right)\cdot\frac{5}{2}=$$
$$=\frac{6}{35}:\left(\frac{2+1}{14}\right)\cdot\frac{5}{2}=$$
$$=\frac{6}{35}:\frac{3}{14}\cdot\frac{5}{2}=$$
$$=\frac{6}{35}\cdot\frac{14}{3}\cdot\frac{5}{2}=$$
$$=\frac{6}{\cancel{35}_{5}}\cdot\frac{\cancel{14}^{2}}{3}\cdot\frac{5}{\cancel{2}_{1}}=$$
$$=\frac{6}{3}=2$$

$$\frac{5}{11}\cdot\left[1+\left(1-\frac{1}{12}\cdot\frac{21}{5}\right)\right]\cdot\frac{8}{10}-\frac{1}{2}=$$
$$=\frac{5}{11}\cdot\left[1+\left(1-\frac{1}{4}\cdot\frac{7}{5}\right)\right]\cdot\frac{4}{5}-\frac{1}{2}=$$
$$=\frac{5}{11}\cdot\left[1+\left(1-\frac{7}{20}\right)\right]\cdot\frac{4}{5}-\frac{1}{2}=$$
$$=\frac{5}{11}\cdot\left[1+\frac{13}{20}\right]\cdot\frac{4}{5}-\frac{1}{2}=$$
$$=\frac{5}{11}\cdot\frac{33}{20}\cdot\frac{4}{5}-\frac{1}{2}=$$
$$=\frac{1}{1}\cdot\frac{3}{5}\cdot\frac{1}{1}-\frac{1}{2}=$$
$$=\frac{3}{5}-\frac{1}{2}=$$
$$=\frac{6-5}{10}=\frac{1}{10}$$

$$1-\left[\left(\frac{3}{5}+\frac{2}{3}:\frac{4}{3}\right)\cdot\frac{10}{3}-2\right]:\left(1+\frac{2}{3}\right)=$$
$$=1-\left[\left(\frac{3}{5}+\frac{2}{3}\cdot\frac{3}{4}\right)\cdot\frac{10}{3}-2\right]:\frac{5}{3}=$$
$$=1-\left[\left(\frac{3}{5}+\frac{1}{2}\right)\cdot\frac{10}{3}-2\right]\cdot\frac{3}{5}=$$
$$=1-\left[\frac{6+5}{10}\cdot\frac{10}{3}-2\right]\cdot\frac{3}{5}=$$
$$=1-\left[\frac{11}{10}\cdot\frac{10}{3}-2\right]\cdot\frac{3}{5}=$$
$$=1-\left[\frac{11}{3}-2\right]\cdot\frac{3}{5}=$$
$$=1-\left[\frac{11-6}{3}\right]\cdot\frac{3}{5}=$$
$$=1-\frac{5}{3}\cdot\frac{3}{5}=$$
$$=1-1=0$$

$$\left(\frac{1}{4}\cdot\frac{5}{2}-\frac{3}{2}\cdot\frac{1}{4}\right)\cdot\left(\frac{6}{3}\cdot\frac{5}{4}+1\right):\left(\frac{6}{10}\cdot\frac{5}{2}+1\right)=$$
$$=\left(\frac{5}{8}-\frac{3}{8}\right)\cdot\left(\frac{5}{2}+1\right):\left(\frac{3}{2}+1\right)=$$
$$=\frac{\cancel{2}}{8}\cdot\frac{7}{\cancel{2}}:\frac{5}{2}=$$
$$=\frac{7}{8}\cdot\frac{2}{5}=\frac{7}{20}$$

$$\left(\frac{1}{7}-\frac{1}{14}\right):\left[\left(\frac{1}{5}:\frac{7}{3}+\frac{1}{7}\right)\cdot\left(\frac{3}{16}+\frac{1}{8}\right)\right]=$$
$$=\left(\frac{2-1}{14}\right):\left[\left(\frac{1}{5}\cdot\frac{3}{7}+\frac{1}{7}\right)\cdot\left(\frac{3+2}{16}\right)\right]=$$
$$=\frac{1}{14}:\left[\left(\frac{3}{35}+\frac{1}{7}\right)\cdot\frac{5}{16}\right]=$$
$$=\frac{1}{14}:\left[\left(\frac{3+5}{35}\right)\cdot\frac{5}{16}\right]=$$
$$=\frac{1}{14}:\left[\frac{8}{35}\cdot\frac{5}{16}\right]=$$
$$=\frac{1}{14}:\left[\frac{1}{7}\cdot\frac{1}{2}\right]=$$
$$=\frac{1}{14}:\frac{1}{14}=1$$

$$\left\{\left[\left(\frac{3}{4}-\frac{2}{5}\right)\div\frac{8}{7}+\left(1-\frac{1}{2}\right)\right]:\frac{3}{5}\right\}:\left(1+\frac{1}{2}\right)+2=$$
$$=\left\{\left[\left(\frac{15-8}{20}\right)\cdot\frac{8}{7}+\frac{1}{2}\right]\cdot\frac{5}{3}\right\}:\left(\frac{2+1}{2}\right)+2=$$
$$=\left\{\left[\frac{7}{20}\cdot\frac{8}{7}+\frac{1}{2}\right]\cdot\frac{5}{3}\right\}:\frac{3}{2}+2=$$
$$=\left\{\left[\frac{2}{5}+\frac{1}{2}\right]\cdot\frac{5}{3}\right\}\cdot\frac{2}{3}+2=$$
$$=\left\{\frac{4+5}{10}\cdot\frac{5}{3}\right\}\cdot\frac{2}{3}+2=$$
$$=\left\{\frac{9}{10}\cdot\frac{5}{3}\right\}\cdot\frac{2}{3}+2=$$
$$=\frac{3}{2}\cdot\frac{2}{3}+2=$$
$$=1+2=3$$

$$\left[\left(\frac{2}{4}-\frac{1}{3}\right)\cdot\frac{3}{2}+\left(\frac{2}{6}-\frac{1}{4}\right)\cdot\left(1-\frac{2}{5}\right)\right]:\frac{6}{20}+1=$$
$$\left[\left(\frac{2}{4}-\frac{1}{3}\right)\cdot\frac{3}{2}+\left(\frac{2}{6}-\frac{1}{4}\right)\cdot\left(1-\frac{2}{5}\right)\right]:\frac{6}{20}+1=$$
$$=\left[\left(\frac{1}{2}-\frac{1}{3}\right)\cdot\frac{3}{2}+\left(\frac{1}{3}-\frac{1}{4}\right)\cdot\left(\frac{5-2}{5}\right)\right]:\frac{3}{10}+1=$$
$$=\left[\left(\frac{3-2}{6}\right)\cdot\frac{3}{2}+\left(\frac{4-3}{12}\right)\cdot\frac{3}{5}\right]\cdot\frac{10}{3}+1=$$
$$=\left[\frac{1}{6}\cdot\frac{3}{2}+\frac{1}{12}\cdot\frac{3}{5}\right]\cdot\frac{10}{3}+1=$$
$$=\left[\frac{1}{4}+\frac{1}{20}\right]\cdot\frac{3}{5}+1=$$
$$=\left[\frac{5+1}{20}\right]\cdot\frac{10}{3}+1=$$
$$=\frac{6}{20}\cdot\frac{10}{3}+1=$$
$$=\frac{3}{10}\cdot\frac{10}{3}+1=$$
$$=1+1=2$$

$$\left\{\left[27:\left(1+\frac{3}{4}+\frac{3}{4}\cdot\frac{2}{3}\right)\right]\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}=$$
$$=\left\{\left[27:\left(1+\frac{3}{4}+\frac{1}{2}\right)\right]\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}=$$
$$=\left\{\left[27:\frac{4+3+2}{4}\right]\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}=$$
$$=\left\{\left[27:\frac{9}{4}\right]\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}=$$
$$=\left\{27\cdot\frac{4}{9}\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}=$$
$$=\left\{3\cdot4\cdot\frac{3}{4}\right\}\cdot\frac{2}{3}=$$
$$=\{3\cdot3\}\cdot\frac{2}{3}=3\cdot2=6$$

Keywords

Matematica, Aritmetica, Frazioni, Espressioni Q, addizione, sottrazione, moltiplicazione, divisione, esercizi con soluzioni

Math, Arithmetic, Fraction expressions, Fraction, Expression, Addition, Subtraction, Multiplication, Division, Fraction expressions solved

Matemática, Aritmética, Fracción, Expresiones, Resta, Sustracción, Suma, Adición, Multiplicación, División

Mathématique, Arithmétique, Fraction, Problèmes avec fractions, Addition, Soustraction, *Multiplication, Division*

Mathematik, Arithmetik, Bruchrechnung, Bruch, Subtraktion, Addition, Multiplikation, Division

Arabic: كَسْر
Chinese (Simplified): 分数
Chinese (Traditional): 分數
Czech: zlomek
Danish: brøkdel
Dutch: deel, breuk
Estonian: murd(arv)
Finnish: murtoluku
French: fraction
Greek: κλάσμα
Hungarian: hányad, tört(rész)
Icelandic: brot
Indonesian: pecahan
Japanese: 分数
Korean: 분수
Lithuanian: trupmena
Norwegian: brøk(del)
Polish: ułamek
Portuguese (Brazil): fração
Portuguese (Portugal): fracção
Romanian: fracţie
Russian: дробь
Slovak: zlomok
Slovenian: ulomek
Swedish: del
Turkish: kesir

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