

# STUDIA IL CAPITOLO SUI VERTEBRATI BUONE VACANZE ARRIVEDERCI A SETTEMBRE



Calcola il valore delle seguenti espressioni contenenti le quattro operazioni fondamentali e la potenza.

$$486. \left[ \left( \frac{1}{2} + \frac{2}{3} - \frac{1}{4} \right) \times \frac{3}{22} + \left( 1 + \frac{1}{2} \right)^3 \right] : \left( \frac{7}{2} - 2 \right)^2 \quad \left[ \frac{14}{9} \right]$$

$$487. \frac{1}{2} + \frac{3}{8} : \left[ \frac{2}{3} - \frac{3}{8} : \left( \frac{2}{5} + \frac{1}{2} \right) \right] + \left[ \left( \frac{3}{2} - \frac{2}{3} \right) : \left( \frac{3}{2} - \frac{1}{4} \right)^2 \right] - \frac{2}{9} \quad \left[ \frac{20}{9} \right]$$

$$488. \left( \frac{9}{11} - \frac{2}{3} \right) : \frac{1}{11} - \left[ \left( 3 - \frac{1}{4} - \frac{3}{8} \right) : \left( 5 - \frac{1}{4} \right) \right]^2 - \left[ \left( 2 + \frac{3}{4} \right) - \left( 1 + \frac{1}{2} \right) \right] \quad \left[ \frac{1}{5} \right]$$

$$489. 2 - \frac{13}{5} : \frac{13}{2} + \frac{4}{5} \times \left( \frac{3}{2} \right)^3 \times \left( \frac{2}{9} \right)^2 \times \frac{81}{6} : \left( 1 + \frac{1}{2} \right)^3 + \frac{5^2 \times 2^2}{5^3} \quad \left[ \frac{44}{15} \right]$$

$$490. \left\{ \left[ \left( 15 - \frac{7}{2} + \frac{1}{2} \right)^2 \times \left( \frac{1}{3} - \frac{1}{4} \right)^2 \right] + \left( \frac{7}{5} \times \frac{10}{2} \times \frac{3}{14} \right) \right\}^2 \quad \left[ \frac{25}{4} \right]$$

$$491. \left\{ \left[ \left( 3 - \frac{1}{2} - \frac{37}{60} \right) - \left( \frac{3}{4} + \frac{3}{60} \right) \right] - 1 \right\}^2 : \left( \frac{5}{36} \times \frac{7}{2} \right) \times \frac{5}{2} \quad \left[ \frac{1}{28} \right]$$

$$492. \left\{ \left[ \left( \frac{5}{3} + \frac{1}{6} - \frac{1}{2} \right) : \frac{28}{15} \right]^2 \times \left( \frac{5}{7} \right)^3 : \left( \frac{5}{7} \right)^4 \right\} - \left( \frac{3}{4} - \frac{2}{7} \right) \quad \left[ \frac{1}{4} \right]$$

$$493. \left\{ \frac{2}{8} + \left[ \left( \frac{3}{4} + \frac{1}{7} \times \frac{14}{3} \right)^2 : \left( \frac{34}{6} \right)^2 \right] - \frac{1}{4} \right\}^3 : \left( \frac{1}{16} \right)^2 \quad \left[ \frac{1}{16} \right]$$

$$494. \left\{ \left( \frac{3}{2} - \frac{2}{3} \right)^2 : \left[ \left( 3 - \frac{10}{6} \right)^2 \times \left( \frac{4}{3} \right)^3 : \left( 1 + \frac{1}{3} \right)^4 \right]^2 - \left( \frac{5}{8} \right)^2 \right\} \quad [0]$$

$$495. \left\{ \left[ \left( \frac{6}{5} \right)^6 \times \left( \frac{5}{12} \right)^6 \right]^4 : \left[ \left( \frac{13}{4} \right)^7 \times \left( \frac{2}{13} \right)^7 \right]^3 \right\}^2 : \frac{5}{32} \quad \left[ \frac{1}{10} \right]$$

$$496. 4 \times \left\{ \left[ \left( \frac{1}{8} + \frac{5}{12} + \frac{5}{8} - \frac{1}{6} \right) : \left( \frac{1}{3} - \frac{1}{4} + \frac{3}{4} + \frac{1}{2} \right) \right]^2 - \left[ 1 - \left( \frac{4}{5} - \frac{2}{3} \right) \right] \times \frac{5}{13} \right\} \quad \left[ \frac{11}{12} \right]$$



512.  $\left\{ \left[ \frac{6}{10} - \left( \frac{5}{6} \times \frac{9}{7} \right) : \frac{25}{14} \right] + \left[ \frac{3}{2} \times \left( \frac{2}{3} \right)^2 \right]^2 \right\} : \left[ \frac{4}{3} + \frac{1}{7} - \frac{4}{9} \right]$   $\left[ \frac{28}{65} \right]$   
 513.  $\left\{ 2 - \left[ \left( 2 + \frac{4}{7} \right) : \left( 3 - \frac{2}{3} \right) \times \left( \frac{3}{2} - \frac{1}{3} \right) \right] + \left( 2 - \frac{1}{7} \right) \right\} : \left( \frac{4}{7} \right)^2 - \frac{11}{2}$   $\left[ \frac{19}{8} \right]$   
 514.  $\left\{ \left( \frac{3}{2} + \frac{1}{5} \times \frac{25}{4} : \frac{15}{24} \right)^2 : \left[ \left( \frac{7}{3} \right)^3 \times \left( \frac{7}{3} \right)^4 : \left( \frac{7}{3} \right)^5 \right] \right\} - \left( 1 - \frac{1}{2} \times \frac{4}{3} \right)^2$   $\left[ \frac{77}{36} \right]$   
 515.  $\left( \frac{5}{8} \right)^2 - \left\{ \left[ \left( \frac{1}{4} - \frac{1}{8} \right)^2 \times \left( \frac{1}{2} + \frac{2}{5} \right)^2 \times \left( \frac{2}{3} \right)^3 \right] : \left( \frac{1}{2} - \frac{2}{25} \right) \times 7 \right\}$   $\left[ \frac{21}{64} \right]$   
 516.  $\left\{ \left[ \left( \frac{3}{11} + \frac{5}{22} \right)^2 : \left( \frac{8}{25} + \frac{1}{5} + 1 - \frac{3}{2} \right) - \frac{3^2}{2} \right] + \left( \frac{1}{4} + \frac{1}{4} : 3 \right)^2 \right\} \times \frac{36}{73}$   $[4]$   
 517.  $\left\{ \left( \frac{7}{5} \right)^2 : \left[ \left( \frac{3}{5} + \frac{1}{3} \right)^4 : \left( \frac{2}{5} + \frac{8}{15} \right)^3 \times \left( \frac{16}{15} - \frac{4}{30} \right) \right] \right\} - \frac{3}{4}$   $\left[ \frac{3}{2} \right]$   
 518.  $\left\{ \left[ \left( \frac{1}{8} + \frac{3}{4} \right) \times \frac{4}{3} - \left( \frac{4}{3} - \frac{1}{2} \right) \times \frac{1}{10} \right]^3 \times \left( \frac{13}{12} \right)^2 : \left( \frac{1}{2} + \frac{7}{12} \right)^4 \right\} - 1$   $\left[ \frac{1}{12} \right]$   
 519.  $\left\{ \left( \frac{10}{13} \times \frac{26}{25} \right) - \left( \frac{3}{4} \times \frac{20}{9} \times \frac{2}{5} \right) + \left[ \left( \frac{5}{4} + \frac{1}{2} - 1 - \frac{1}{4} \right)^2 \times \frac{2^4}{5} \right] \right\} : \frac{8}{25}$   $\left[ \frac{35}{12} \right]$   
 520.  $\left\{ \left[ \left( \frac{7}{10} + \frac{1}{2} \right) : \left( \frac{1}{2} - \frac{2}{5} \right) \right] \times \left( \frac{1}{2} + \frac{1}{3} \right) - \left( \frac{25}{16} \times \frac{8}{10} \times \frac{4}{45} \times 27 \right) \right\} : \left( \frac{3}{2} \times \frac{9}{8} \times \frac{16}{8} \times \frac{28}{27} \right)^2$   $[28]$   
 521.  $\left\{ \left[ \left( \frac{1}{5} \right)^3 \right]^4 : \left[ \left( \frac{1}{5} \right)^3 \right]^3 : \frac{1}{5} \right\} \times \left( \frac{7}{3} + \frac{10}{5} \times \frac{12}{4} \right) + \left( 6 - \frac{1}{6} - \frac{1}{3} : \frac{2}{5} \right)$   $\left[ \frac{16}{3} \right]$   
 522.  $\left\{ \left[ \left( \frac{5}{4} - \frac{1}{3} \right)^2 : \left( 2 + \frac{3}{4} - \frac{7}{3} \right)^3 \times \frac{5}{12} \right] : \left( \frac{9}{10} - \frac{8}{15} \right) \right\} - \left( 12 - \frac{2}{5} \right)$   $\left[ \frac{8}{5} \right]$   
 523.  $\left\{ \frac{4}{13} \times \left[ \left( \frac{5}{8} : \frac{3}{4} : \frac{5}{12} \right)^2 + \left( 3 : \frac{15}{16} : \frac{8}{5} \right)^2 \right] - \left( 1 + \frac{1}{4} \right) \right\} + \left( \frac{5}{3} - \frac{1}{6} \right)^2$   $\left[ \frac{45}{13} \right]$   
 524.  $\frac{9}{4} - \left\{ \left[ \left( \frac{1}{2} \right)^4 \times \left( \frac{5}{2} \right)^4 : \left( \frac{10}{4} \right)^4 \right]^3 : \left[ \left( \frac{1}{2} \right)^4 \right]^2 + \left( 3 - \frac{7}{4} \right) \right\}$   $\left[ \frac{15}{16} \right]$   
 525.  $\left\{ \left[ \left( \frac{3}{5} \right)^3 \times \left( \frac{3}{5} \right)^4 : \left( \frac{3}{5} \right)^6 \right]^2 - \left( \frac{3}{10} : \frac{15}{2} \right) \right\} \times \left[ \left( \frac{5}{4} \right)^4 \times \left( \frac{5}{4} \right)^2 : \left( \frac{5}{4} \right)^5 \right]^2$   $\left[ \frac{1}{2} \right]$   
 526.  $2 \times \left\{ \left[ \left( \frac{1}{4} \right)^2 + \left( \frac{3}{2} \right)^3 : \frac{9}{8} \times \frac{1}{4} \right] + \left[ \frac{9}{10} \times \left( \frac{5}{3} - \frac{5}{9} \right) \right] \right\} - \left( \frac{3}{2} \right)^2$   $\left[ \frac{11}{8} \right]$