



$$Q = \frac{-4 + \frac{1}{2}}{1 - \frac{2}{5}} \div \frac{\frac{-1}{3} + \frac{4}{3}}{\frac{5}{10} + \frac{1}{3}}$$

$$R = \frac{2 + \frac{1}{4}}{3 - \frac{1}{4}} \times \frac{1 + \frac{2}{5}}{\frac{4}{15} - \frac{1}{10}} \times \frac{\frac{2}{5} - \frac{1}{6}}{2 - \frac{1}{5}}$$

$$S = \frac{1 - \frac{1}{2} + \frac{1}{1 + \frac{1}{2}}}{1 + \frac{1}{2} + \frac{1}{1 - \frac{1}{2}}}$$

التمرين الخامس:

أحسب ما يلي:

$$S = 5 + \frac{1}{4 + \frac{1}{3 + \frac{1}{2}}}; \quad R = 1 + \frac{1}{2 + \frac{1}{3 + \frac{1}{4}}}$$

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

رفع التحدي:

1- ليكن n عددا صحيحا طبيعيا غير منعدم.

$$\frac{1}{n(n+1)} = \frac{1}{n} - \frac{1}{n+1} \quad \text{بين أن:}$$

2- استنتج قيمة المجموع:

$$\frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \dots + \frac{1}{98 \times 99} + \frac{1}{99 \times 100}$$

التمرين الأول:

أحسب ما يلي:

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

$$D = \frac{7}{4} - \frac{3}{4} \times \frac{1}{9}$$

$$F = \left(\frac{5}{6} - \frac{2}{3} \right)^2$$

$$A = \frac{1}{3} + \frac{1}{4} + \frac{1}{5}$$

$$C = \frac{3}{2} - \frac{5}{6} \times \frac{2}{15}$$

$$E = \left(\frac{7}{6} - \frac{2}{3} \right) \div \frac{2}{3}$$

التمرين الثاني:

أحسب ما يلي:

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

$$H = \left(3 - \frac{1}{5} - \frac{4}{3} \right) - \left(\frac{2}{5} + \frac{7}{3} - 3 \right)$$

التمرين الثالث:

أحسب ما يلي:

$$I = \left[\left(\frac{7}{8} - \frac{9}{16} - 13 \right) + \left(\frac{-5}{12} + \frac{4}{27} \right) + 1 \right] - \left(\frac{9}{4} + \frac{1}{3} - 6 \right)$$

$$J = \left(\frac{-7}{9} \right) \left[\left(3 + \frac{1}{4} - \frac{19}{5} \right) - \left(\frac{-2}{5} - \frac{3}{4} \right) \right]$$

$$K = \left(2 - \frac{1}{6} - \frac{4}{5} \right) \left(\frac{4}{12} \right) - \left(5 - \frac{5}{4} \right) \left[1 - \left(\frac{1}{3} - \frac{1}{5} \right) \right]$$

التمرين الرابع:

أحسب ما يلي:

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

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

$$P = \frac{\frac{5}{3} - \frac{3}{5}}{\frac{-2}{3} + \frac{2}{5}}$$

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