Folgen mit rationalen Zahlen (Aufgaben-Beispiel)

$a_1 = \frac{2}{3} - \frac{1}{2} = \frac{4}{6} - \frac{3}{6} = \frac{1}{6}$

$a_2 = \frac{3}{4} - \frac{2}{3} = \frac{9}{12} - \frac{8}{12} = \frac{1}{12}$

$a_3 = \frac{4}{5} - \frac{3}{4} = \frac{16}{20} - \frac{15}{20} = \frac{1}{20}$

$a_4 = \frac{5}{6} - \frac{4}{5} = \frac{25}{30} - \frac{24}{30} = \frac{1}{30}$

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$a_{10} = \frac{11}{12} - \frac{10}{11} = \frac{121}{132} - \frac{120}{132} = \frac{1}{132}$

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$a_x = \frac{x+1}{x+2} - \frac{x}{x+1} = \frac{(x+1)^2}{(x+1)(x+2)} - \frac{x(x+2)}{(x+1)(x+2)} = \frac{1}{(x+1)(x+2)}$