分组法和换元法

练习题

一、换元法

1. $(1+0.45+0.56)\times(0.45+0.56+0.67)-(1+0.45+0.56+0.67)\times(0.45+0.56)$

2. $\left(1+\frac{1}{2}+\frac{1}{4}\right)\times\left(\frac{1}{2}+\frac{1}{4}+\frac{1}{6}\right)-\left(1+\frac{1}{2}+\frac{1}{4}+\frac{1}{6}\right)\times\left(\frac{1}{2}+\frac{1}{4}\right)$

3. $\left(1+\frac{1}{2}+\frac{1}{3}+\frac{1}{4}\right)\times\left(\frac{1}{2}+\frac{1}{3}+\frac{1}{4}+\frac{1}{5}\right)-\left(1+\frac{1}{2}+\frac{1}{3}+\frac{1}{4}+\frac{1}{5}\right)\times\left(\frac{1}{2}+\frac{1}{3}+\frac{1}{4}\right)$

4. $\left(\frac{1}{5}+\frac{1}{7}+\frac{1}{9}+\frac{1}{11}\right)\times\left(\frac{1}{7}+\frac{1}{9}+\frac{1}{11}+\frac{1}{13}\right)-\left(\frac{1}{5}+\frac{1}{7}+\frac{1}{9}+\frac{1}{11}+\frac{1}{13}\right)\times\left(\frac{1}{7}+\frac{1}{9}+\frac{1}{11}\right)$

5. $\left(\frac{5}{12}+\frac{7}{32}+\frac{3}{17}\right)\times\left(\frac{7}{32}+\frac{3}{17}+\frac{4}{13}\right)-\left(\frac{5}{12}+\frac{7}{32}+\frac{3}{17}+\frac{4}{13}\right)\times\left(\frac{7}{32}+\frac{3}{17}\right)$

二、分组法

1. $1-2+3-4+5-6+\cdots+97-98+99$

2. $2000-1996+1992-1988+\cdots+16-12+8-4$

3. $\frac{1}{2}+\frac{1}{3}+\frac{2}{3}+\frac{1}{4}+\frac{2}{4}+\frac{3}{4}+\frac{1}{5}+\frac{2}{5}+\frac{3}{5}+\frac{4}{5}+\cdots+\frac{1}{100}+\frac{2}{100}+\cdots+\frac{99}{100}$

4. 数列2,5,8,9,3,2,5,8,9,3,2....前113项的和？

5. $99\cdots9\times99\cdots9+199\cdots9$的末尾有多少个零？

1992 个 9　　1992 个 9　　1992 个 9

分组法和换元法

练习题答案

一、换元法：

1. 0.67

2. $\frac{1}{6}$

3. $\frac{1}{5}$

4. $\frac{1}{65}$

5. $\frac{9}{35}$

二、组法：

1.5000

2.1000

3.2475

4.609

5.3984