

ΒΑΘΜΟΣ:.....

ΔΙΑΓΩΝΙΣΜΑ

ΜΑΘΗΜΑ: Μαθηματικά

ΗΜΕΡΟΜΗΝΙΑ: 16 / 01 / 12

ΟΝΟΜΑΤΕΠΩΝΥΜΟ :

Να υπολογίσετε τα ολοκληρώματα :

1. $\int (4\chi^3 - \frac{5}{\chi} - 5e^{2\chi} + 2\eta\mu 4\chi - \frac{2}{\eta\mu^2\chi})d\chi =$

2. $\int (\tau\epsilon\mu^2\chi e^{\epsilon\phi\chi} - x^2(x^3 - 3)^5 + \frac{\ln^3\chi}{\chi} - \frac{\chi - 1}{\chi^2 - 2\chi + 3})d\chi =$

3. $\int \eta\mu^3\chi \cdot \sigma\upsilon\nu^6\chi dx =$

4. $\int \frac{3}{\sqrt{1-\chi^2}} + \frac{\chi}{\sqrt{1-\chi^2}} - \frac{\tau\omicron\xi\eta\mu\chi}{\sqrt{1-\chi^2}} + \frac{4}{\sqrt{1-\chi}} d\chi =$

5. $\int \frac{2x-7}{(x-1)(x^2+4)} dx =$

6. $\int (\chi^2 + 2) \cdot e^{4\chi} d\chi =$

7. $\int \frac{2\chi^2 - 2\chi + 1}{\chi^2 - 4\chi + 8} d\chi =$

8. $\int (\frac{1}{3 + 2\sigma\upsilon\nu\chi - \eta\mu\chi})d\chi, \quad t = \epsilon\phi \frac{\chi}{2}$

9. $\int \chi \cdot \sqrt{9 - x^2} d\chi \quad , x = 3\eta\mu\theta, \quad -\frac{\pi}{2} < \theta < \frac{\pi}{2}$

10. $\int (\frac{\eta\mu^{10}\chi}{\sigma\upsilon\nu^{12}\chi} - \epsilon\phi^{12}\chi - \epsilon\phi^{14}\chi) d\chi$