question 2 views

Daily Challenge 19.1

(**Due: Monday 11/19 at 12:00 noon Eastern**)

This is the last easy challenge (exercise). Tomorrow I'll go back to posting serious problems.

(1) Exercise: one more boring calculation.

Compute $\int_{-1}^{2} x^4 \, dx$ using the FTC.

daily_challenge

Updated 5 months ago by Christian Ferko

the students' answer, *where students collectively construct a single answer*

Final boring problem; by the FTC we subtract the antiderivative at b and a;
$\frac{1}{5}2^5 - \frac{1}{5}(-1)^5 = \frac{32}{5} + \frac{1}{5} = \frac{33}{5}$

Updated 4 months ago by Logan Pachulski

the instructors' answer, *where instructors collectively construct a single answer*

By an utter triviality,

$$\int_{-1}^{2} x^4 \, dx = \left[\frac{x^5}{5} \right]_{-1}^{2} = \frac{2^5}{5} - \frac{(-1)^5}{5} = \frac{33}{5}.$$

Updated 4 months ago by Christian Ferko

followup discussions *for lingering questions and comments*