Practice Test 2 – SOLUTIONS

Last modified: Friday March 15, 2024 at 6 pm

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1. Which of the following integrals are improper? Select all that apply. For the integrals that are improper, explain why they are improper.

(a) $\displaystyle\int_1^\infty \left(\frac{\sin(x)}{x}\right)^2 dx$

(b) $\displaystyle\int_1^\infty \frac{1}{1-\frac{1}{x}} dx$

(c) $\displaystyle\int_0^1 x^{-1/2} dx$

(d) $\displaystyle\int_2^3 \frac{x^2+1}{(x-2)^2}$