

Errata for Calculus, Fifth Edition

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p. iv, line 1: ... *problem* types ...

p. 307: Omit Problem 12 entirely.

p. 407, line 2: Insert a comma after “pyramid”.

p. 509, line -2: ... *Maclaurin* series ...

p. 582, Problem 7, line 2: *necessary*

p. 638, lines 11-12: ... vector functions *whose derivative* is nowhere ...

p. 678, line -6: ... *limit* of $f(x, y)$ as ...

p. 772, line 8: The result is $\frac{1}{4}\pi a^4$.

p. 792, Problem 1(k): Insert a comma after $r \sin \theta$.

p. 808, line 1: ... \vec{r} is differentiable and \vec{r}' is nonzero.

p. 829, line 10: *continuous*

p. 836, lines 3-4: ... f, g and h are continuously differentiable *and their derivatives are nonzero*.

p. 843, line 7: Add the sentence, “We will assume that R is mapped onto S in a one-to-one fashion, as discussed in Section 13.7, p. 786.”

p. 843, line -7: ... a continuous *nonzero* function ...

p. 843, line -1: The vector equation should be

$$\vec{r}(u, v) = \langle a \cos u \sin v, a \sin u \sin v, a \cos v \rangle, u \in [0, 2\pi], v \in [0, \pi].$$

p. 844, lines 2-5: These equations should be

$$\begin{aligned}\frac{\partial \vec{r}}{\partial u} &= \langle -a \sin u \sin v, a \cos u \sin v, 0 \rangle \\ \frac{\partial \vec{r}}{\partial v} &= \langle a \cos u \cos v, a \sin u \cos v, -a \sin v \rangle \\ \vec{N} &= \langle -a^2 \cos u \sin^2 v, -a^2 \sin u \sin^2 v, -a^2 \sin v \cos v \rangle \\ &= (-a \sin v) \vec{r}(u, v).\end{aligned}$$

p. 872, line 16: Replace “flux” with “circulation”.

p. 872, line 17: Replace the equal sign with “is in the direction of”.

p. 873, line -6: ... xz -plane ...

p. 884, Problem 16 (c): Capitalize “s” on “show”.

p. 884, Problem 1(b): The first integrand should be $\vec{F} \cdot d\vec{r}$.

p. 923, Figure 35: The second set of graphs should be labeled “(d)”.

p. 927: Omit problem 12. Section 6.4, Problem 9: $\frac{1}{4} \int_0^4 (5 - \tan^{-1} \frac{x}{4}) dx \approx 4.56$.

p. 930, Spotlight 6.9: Omit the numeral 12. Labels a, b, c, and d should be 1, 2, 3, and 4. Labels i, ii, iii, iv, and v should be a, b, c, d, and e.

p. 932, Problem 9(g): $\frac{1}{2}(x+2)\sqrt{x^2+4x} - 2 \ln \dots$

p. 933, Problem 5(c): $(2e - \frac{1}{2}e^2 - \frac{7}{6})\pi$.

p. 936, Section 9.1, Problem 7: ... increasing if the function is *increasing and* concave down, and decreasing if the function is *increasing and* concave upward. *This is reversed for a decreasing function.*

p. 949, Section 13.8, Problem 5(a): $e + \frac{1}{8}e^2 - \frac{7}{8}$; Problem 7(c): $m = \frac{272}{15}$; $(\bar{x}, \bar{y}) = (\frac{55}{68}, \frac{324}{119})$.