

MTH 263 Practice Test #2

SPRING 1999

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Name _____

Instructions. The Answer Section follows this section. The Solution Section follows the Answer Section.

1. Find the parametric equations of the line containing the points $(3, -7, 4)$ and $(2, 1, 2)$.
2. Find an equation of the plane containing the point $(4, 2, 1)$ and having the normal vector $\vec{n} = \langle 5, 5, 3 \rangle$.
3. Graph the surface given by the equation $9x^2 + 16y^2 - 36z = 0$.

4. Compute:

$$\int_0^1 \int_{-1}^1 \int_1^2 (x^2 + yz) dz dx dy$$

5. Given $\int_0^1 \int_{x^3}^{\sqrt{x}} y dy dx$, **reverse** the order of integration, and then integrate.