Name: (Please print) ____________________________

Time allowed: 10 minutes.

Show your work as appropriate; answers without work or reasoning shown may get little or no partial credit.

No notes, non-graphing calculators only (but shouldn’t be needed).

Raise your hand if you have a question or need more paper.

All three questions are about the integral

\[ \int_{-3}^{3} \int_{-\sqrt{9-y^2}}^{0} x \, dx \, dy. \]

1) Reverse the order of integration in xy-coordinates.
2) Change to polar coordinates.
3) Evaluate, using either order of integration in either coordinate system.