

The final exam is Monday, March 17, at 8:00 am, in our classroom. This is also the final deadline for any late good problems.

The exam is cumulative, but there will not be any questions specifically from Chapters 1 and 2. The tests and their study guides give good sample questions for the sections they covered.

Here are some sample questions from the sections that were not covered by the other tests.

1. Graph and label the level curves at $z = -1$, $z = 1$, and $z = 2$ for the equation $zx^2 - y = 0$.
2. Let $f(x, y) = x(y^2 + 3)^5 + \frac{1}{y} + 2x^6 - 9$. Compute:
 - (a) $f_x(x, y) =$
 - (b) $f_y(x, y) =$
 - (c) $f_{xx}(x, y) =$
 - (d) $f_{xy}(x, y) =$
3. Let $f(x, y) = x^2 + xy + y^2 - 6x$. Find all extrema of f and identify any saddle points.