

You are encouraged to work in groups of two to four on this assignment and make a single group submission. Each problem is worth the indicated number of points. For full credit indicate clearly how you reached your answers. All work must be legible and submitted on clean paper without ragged edges.

1. [2 points] Do #25a in §15.5.
2. [2 points] Do #25b in §15.5.
3. [2 points] Do #25c in §15.5.
4. [2 points] Do #26a in §15.5.
5. [2 points] Do #26b in §15.5.
6. [5 points] Do #24 in §15.6
7. [5 points] Find the centroid of the region between  $z = x^2 + y^2$  and  $z = 1 + 2y$ .
8. [2 points extra credit] Set up integrals for the centroid of the region between  $z = a x^2 + y^2$  and  $z = 1 + b y$ .