- Draw a figure (and use it often);
- Using equations:
  - Name the thing(s) you don't know;
  - Write an equation;
  - Identify "beasts";
  - Equations should match "beasts" on both sides of the equation;
- Using coordinates:
  - Draw cross-sections (when necessary);
  - Use round coordinates for round problems;
  - Unit basis vectors:
    - Point in the direction that the coordinate is increasing;
    - Are unit vectors, that is straight arrows with direction.
- Integration:
  - Where vs. what;
  - Chop, multiply, add;
  - Use $d\vec{r}$;
  - Use what you know;
  - Zap with d (when necessary);
  - Don't integrate until:
    - only 1 variable (if 1-dimensional),
    - only 2 variables (if 2-dimensional),
    - only 3 variables (if 3-dimensional),
    - don't forget the limits.
- Differentiation:
  - All derivatives are ratios of small changes;
  - All derivatives are local quantities;
  - Zap with d (when necessary);
  - Equations with differentials tell you about the relastionship of small changes to other small changes;
  - Use $d\vec{r}$ (when necessary).