Review for Mid-term Exam 2:

(see also review topics for mind-term exam 1)

1. Principles of remote sensing using emission in the IR and microwave regions.  
   Lecture 8, Eqs.[8.1]-[8.3], [8.7]-[8.13], [8.17], [8.19], [8.20]-[8.22]

   Lecture 8, Eqs.[8.23]-[8.25], Lab 6

3. Remote sensing of SST. Split-window technique. Microwave vs. IR retrievals of SST.  
   Lecture 9, Eqs.[9.1], [9.6]

   Lectures 9, Eqs.[9.20], [9.21], [9.28], [9.29]-[9.32], [9.32], [9.37], Lab 7

5. Passive remote sensing of precipitation: IR and microwave techniques.  
   Lectures 10-11, Eqs.[10.3], [10.5]

6. Principles of retrievals of cloud properties from passive remote sensing.  
   Lecture 10-11, Lab 8

   Lecture 12, Eqs.[12.1]-[12.8], [12.13], [12.14]-[12.23], [12.26]

8. Radar sensing of precipitation.  
   Lecture 12, Eqs.[12.31]-[12.38], Lab 9

9. Lidar basics. Lidar remote sensing of gases, aerosols, and clouds.  
   Lectures 13, Eqs.[13.1, 13.4, 13.9, 13.13, 13.14], Lab 10