Mathematics 300 Homework, August 30, 2017.

If you have not done so already look at the last assignment and make sure you can do those problems. Read section 1.4 on powers sets. The one fact you should know, but that was only mentioned in passing in class is that if A is finite and $\mathcal{P}(A)$ is the power set of A then

$$|\mathcal{P}(A)| = 2^{|A|}.$$

So if $A = \{1, 2, 4, 9, 13\}$ then

$$|\mathcal{P}(A)| = 2^{|A|} = 2^5 = 32.$$

For problems do 1, 7, 9, 13, and 15 on page 16.