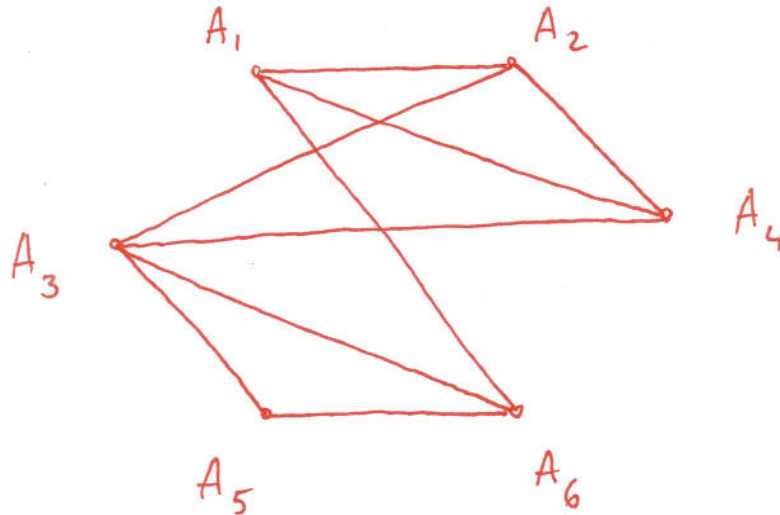Write your name and code on the back.

1. { 5 points }   Construct the intersection graph for the following collection of sets.

$$A_1 = \{0, 1, 2, 3\} \qquad A_2 = \{2, 4\} \qquad A_3 = \{4, 5, 6\}$$

$$A_4 = \{0, 2, 4, 6\} \qquad A_5 = \{5\} \qquad A_6 = \{1, 3, 5\}$$



2. { 5 points }   Draw the call graph for the phone numbers  555-1111,  555-2222, 555-3333,  555-6666,  and  555-7777,  if there are three calls from  555-1111  to 555-6666  and two calls  555-6666  to  555-1111 , two calls from  555-3333  to 555-7777 , one call from  555-7777  to each of the other numbers, and two calls to 555-2222  from each of  555-1111  and  555-6666.

*Label the nodes of the graph by the last digit of the phone numbers.*