```
Question 1:
Union:            {(3, 3), (1, 2), (2, 2), (1, 1), (1, 3), (1, 4)}
Intersection:     {(1, 1)}
Set 1 - set 2:    {(3, 3), (2, 2)}
Set 2 - set 1:    {(1, 2), (1, 3), (1, 4)}

Question 2:
{(4, 4), (3, 4), (3, 1), (3, 3), (4, 1)}

Question 3:
{(2, 4), (2, 1), (3, 4), (3, 1), (1, 1), (1, 4)}

Set:
{(5, -5), (-10, 10), (-3, 3), (-4, 4), (-1, 1), (3, -3), (4, -4), (-6, 6), (10, -
10), (-5, 5), (2, -2), (-7, 7), (8, -8), (9, -9), (0, 0), (1, -1), (6, -6), (-9,
9), (7, -7), (-8, 8), (-2, 2)}
Reflexive:  False
Symmetric:  True
Antisymmetric     False
Transitive:       False
```