***Rotations: A transformation where a figure is turned about a given point****.*

**1.** **Triangle *ABC* is labeled on your graph below.**

****

1. **Rotate Triangle *ABC*, 90o counterclockwise about the origin. Label the triangle *A′ B′ C*′.**
2. **Rotate Triangle *ABC*, 180o counterclockwise about the origin. Label the triangle *A″ B″ C″*.**
3. **Rotate Triangle *ABC*, 270o counterclockwise about the origin. Label the triangle *A′′′ B′′′ C′′′*.**

**.**

**Organize your results from in the table.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Starting Point** | **90°****Rotation CC** | **180°****Rotation CC** | **270°****Rotation CC** | **360°****Rotation CC** |
| ***A* (1, 4)** |  |  |  |  |
| ***B* (5, 2)** |  |  |  |  |
| ***C* (2, 0)** |  |  |  |  |

**Complete each rule for finding the image of any point (*x, y*) under the given rotation.**

**a) 90° rotation about the origin: (*x, y*) → ( , )**

**b) 180° rotation about the origin: (*x, y*) → ( , )**

**c) 270° rotation about the origin: (*x, y*) → ( , )**

**d) 360° rotation about the origin: (*x, y*) → ( , )**

