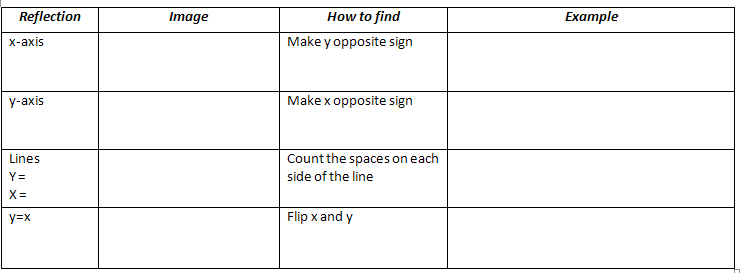
**Unit 4 #4 Reflections**

**Rules for reflections:** *Use MNP: M(6,1), N(3, -7), P(8, -5) as an example*



**Example 1:** Give the new coordinates for the reflection of triangle RST: R(-2, 0) S(5, 4) T(1, -1)

a. over y = x b. over origin c. over y axis

R' = R' = R' =

S' = S' = S' =

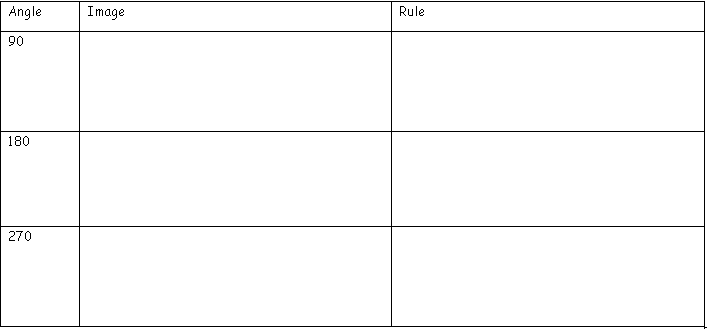
T' = T' = T' =

**Unit 4 #5 Rotations**

\*\*All rotations are done unless otherwise stated.

\*\*Three angles used: \_\_

**ROTATION RULES**



Tips:

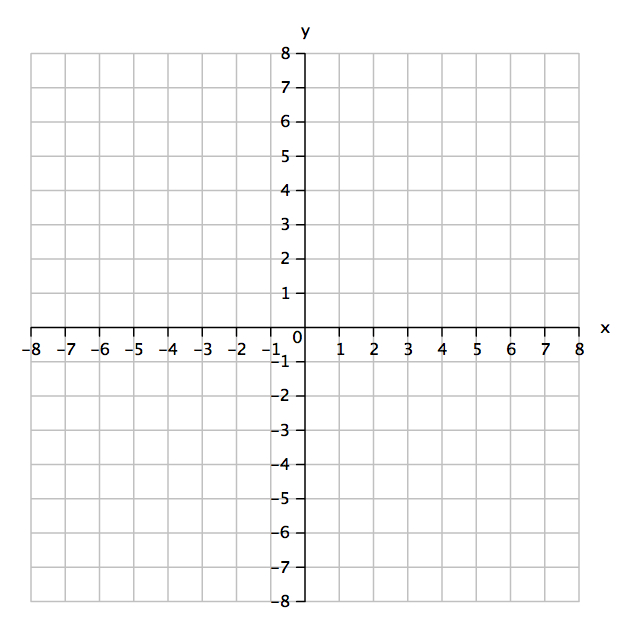
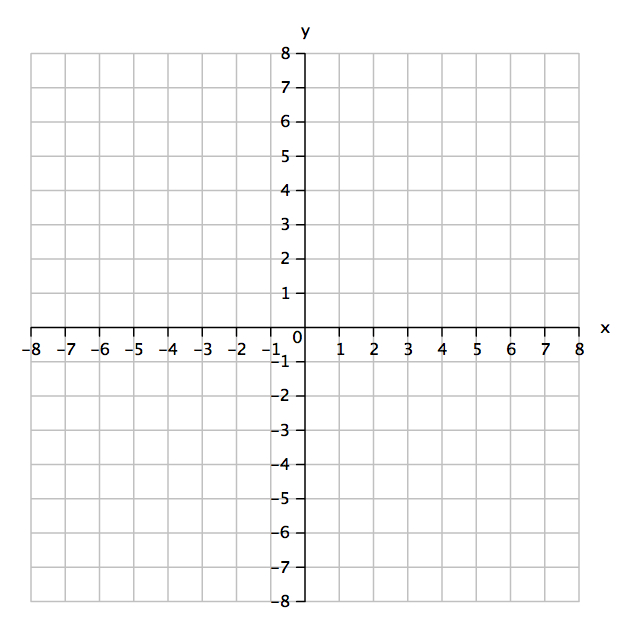
For Clockwise Rotations:

: use 270 rule : use 180 rule : use 90 rule

**Example 2:** Reflect ABC over the x axis. **Example 3:** Reflect ABC over the line y = -2.

Use the x-axis as the line of symmetry. A(-2, -3), B(5, -3), C(1, -2)

A(-2, -3), B(5, -3), C(1, -2)

Examples:

1. Rotate 270: ABC: A(6,2) B(-3,4) C(8,5) 2. Rotate 90: XYZ: X(3,-4) Y(7,2) Z(-6,5) 3. Rotate 180: ABCD: A(5,9) B(8,9) C(8,4)   
 D(5,4)

