



a) $\overline{MQ} + \overline{QA} = \overline{MA}$

b). $\overline{QR} + \overline{RH} = \overline{QH}$

c) $\overline{GR} + \overline{RA} + \overline{AH} = \overline{GH}$

d) $\overrightarrow{RA}$ and $\overrightarrow{RQ}$ are opposite rays.

2. Use these points $T(3,1)$ $U(1,5)$ $V(5,3)$

a) $\triangle TUV$ is reflected over the line $x = -1$. Find the coordinates of the image.

$$T' = (-5, 1) \quad U' = (-3, 5) \quad V' = (-7, 3)$$

b) $\triangle TUV$ is translated according to this rule $(x, y) \rightarrow (x - 4, y + 1)$

Find the coordinates of the image.

$$T'(-1, 2) \quad U'(-3, 6) \quad V'(1, 4)$$

c) Point T is reflected over the line $y = -2$ then reflected over the line $x = 6$.

Find the coordinates of point T after these two reflections.

$$T(3, 1) \rightarrow T'(3, -5) \rightarrow T''(9, -5) \quad T''(9, 5)$$