$$z - z_n = m_n(x - x_n)$$

x-component

$$z = m_n x - m_n x_n + z_n$$

$$m_1 x - m_1 x_1 + z_1 = m_2 x - m_2 x_2 + z_2$$

$$x(m_2 - m_1) = m_2 x_2 - m_1 x_1 + z_1 - z_2$$

$$x = \frac{m_2 x_2 - m_1 x_1 + z_1 - z_2}{(m_2 - m_1)}$$

z-component

$$x = \frac{z - z_n}{m_n} + x_n$$

$$\frac{z - z_1}{m_1} + x_1 = \frac{z - z_2}{m_2} + x_2$$

$$\frac{z - z_1}{m_1} - \frac{z - z_2}{m_2} = x_2 - x_1$$

$$\frac{m_2 z - m_2 z_1 - (m_1 z - m_1 z_2)}{m_1 m_2} = x_2 - x_1$$

$$z(m_2 - m_1) - m_2 z_1 + m_1 z_2 = m_1 m_2 (x_2 - x_1)$$

$$z(m_2 - m_1) = m_1 m_2 (x_2 - x_1) + m_2 z_1 - m_1 z_2$$

$$z = \frac{m_1 m_2 (x_2 - x_1) + m_2 z_1 - m_1 z_2}{(m_2 - m_1)}$$

θ_{MC}	θ_C
180	90
150	120
120	150
90	180
60	210
30	240
0	270

-30 ↘ $+30$

θ_{MC}	θ_C
-180	90
-150	60
-120	30
-90	0
-60	-30
-30	-60
0	-90

$+30$ ↘ -30

$$H(\theta_{MC}) = \begin{cases} -\theta_{MC} + 270 & \text{if } \theta \neq 0 \\ -\theta_{MC} - 90 & \text{otherwise} \end{cases}$$