sample problem: steps into microsteps

$$\frac{1\ \text{step}}{1.8^\circ} \times \frac{16\ \text{microsteps}}{1\ \text{step}} \times \frac{360^\circ}{1\ \text{rotation}} = 3200\ \text{microsteps per rotation}$$

- 850 steps = 1 revolution

$$\frac{16\ \text{microsteps}}{1\ \text{step}} = \frac{x\ \text{microsteps}}{850\ \text{steps}}$$

$x =$ 13600 microsteps per 1 rotation

sample problem: microsteps into millimeters

$$\frac{3200\ \text{ms}}{1\ \text{rotation}} \times \frac{1\ \text{rotation}}{8.6\text{mm}} = 888.89\ \text{microsteps per millimeter}$$

- 13600 microsteps = 1 revolution

$$\frac{13600\ \text{ms}}{1\ \text{rotation}} \times \frac{1\ \text{rotation}}{8.6\text{mm}} = 48960\ \text{microsteps per millimeter}$$