

Clock Hands Rotation by Wasiu Ramoni

Seconds Rotation

$$secR = \frac{sec}{60} \times 360^\circ$$

$$secR = sec \times 6$$

Minutes Rotation

$$minR = \frac{\left(min + \frac{sec}{60}\right)}{60} \times 360^\circ$$

$$minR = \left(min + \frac{sec}{60}\right) \times \frac{1}{60} \times 360^\circ$$

$$minR = 6min + \frac{sec}{10}$$

Hour Rotation

$$hrR = \left(\frac{hr + \frac{min}{60} + \frac{sec}{60 \times 60}}{12}\right) \times 360^\circ$$

$$hrR = \left(hr + \frac{min}{60} + \frac{sec}{60 \times 60}\right) \times \frac{1}{12} \times 360^\circ$$

$$hrR = \left(hr + \frac{min}{60} + \frac{sec}{60 \times 60}\right) \times 30$$

$$hrR = 30hr + \frac{min}{2} + \frac{sec}{120}$$

where secR, minR, hrR are angle of rotation on sec, min and hour hand respectively

sec, min and hr can be extracted from new Date() object.