

Quiz # 4

ESM2204 Spring 2011

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Which statement listed below is not true.

1) Power = (Torque) x (angular rotational velocity, ω)

2) Power = (Torque) x (rotation, θ) / (time)

3) Power = [N] x [m] x [rad] / [sec]

4) Power = [N] x [m] / [sec]

$$T = P / 2\pi f$$

5) Frequency [Hz], $f = (\text{Power, } P) / \{ (\text{Torque, } T) \times \frac{\pi}{2} \}$

6) 1 RPM = 1/60 [cycles]/[sec]

7) 1 [watt] x 1 [sec] = 1 [joule] = 1 [N] x 1 [m]

Dimensional notation: meters [m], force [N], time [sec], etc.

Acronym: RPM, Revolutions Per Minute

Conversions: 2π [rad] = 360 [degrees]