Chapter 9, Solution 1.

(a) V_m = **50 V**.

(b) Period $T = \frac{2\pi}{\omega} = \frac{2\pi}{30} = \underline{0.2094s}$ = **209.4ms**

(c) Frequency f = ω/(2π) = 30/(2π) = **4.775 H_z**.

(d) At t=1ms, v(0.01) = 50cos(30x0.01rad + 10˚)
= 50cos(1.72˚ + 10˚) = **44.48 V** and ωt = **0.3 rad**.