62. (a) The circumference is $c = 2\pi r = 2\pi(0.15 \text{ m}) = 0.94 \text{ m}$.

(b) With $T = (60 \text{ s})/1200 = 0.050 \text{ s}$, the speed is $v = c/T = (0.94 \text{ m})/(0.050 \text{ s}) = 19 \text{ m/s}$. This is equivalent to using Eq. 4-35.

(c) The magnitude of the acceleration is $a = v^2/r = (19 \text{ m/s})^2/(0.15 \text{ m}) = 2.4 \times 10^3 \text{ m/s}^2$.

(d) The period of revolution is $(1200 \text{ rev/min})^{-1} = 8.3 \times 10^{-4} \text{ min}$ which becomes, in SI units, $T = 0.050 \text{ s} = 50 \text{ ms}$.