

8.3. $T_c > T_a = T_d > T_b$. Use $T = \frac{mv^2}{r}$. For (a), $T_a = \frac{mv^2}{r}$. For (b), $T_b = \frac{mv^2}{2r} = \frac{1}{2}T_a$. For (c), $T_c = \frac{(2m)v^2}{r} = 2T_a$.
For (d), $T_d = \frac{(2m)v^2}{2r} = T_a$.