

**7.15.** Block A's acceleration is greater in case b. In case a, the hanging 10 N must accelerate both the mass of A and its own mass, leading to a smaller acceleration than case b, where the entire 10 N force accelerates the mass of block A.

<b>Case a</b>	<b>Case b</b>
$10 \text{ N} = (M_A + M_{10 \text{ N}})a$	$10 \text{ N} = M_A a$
$a = \frac{10 \text{ N}}{(M_A + M_{10 \text{ N}})}$	$a = \frac{10 \text{ N}}{M_A}$