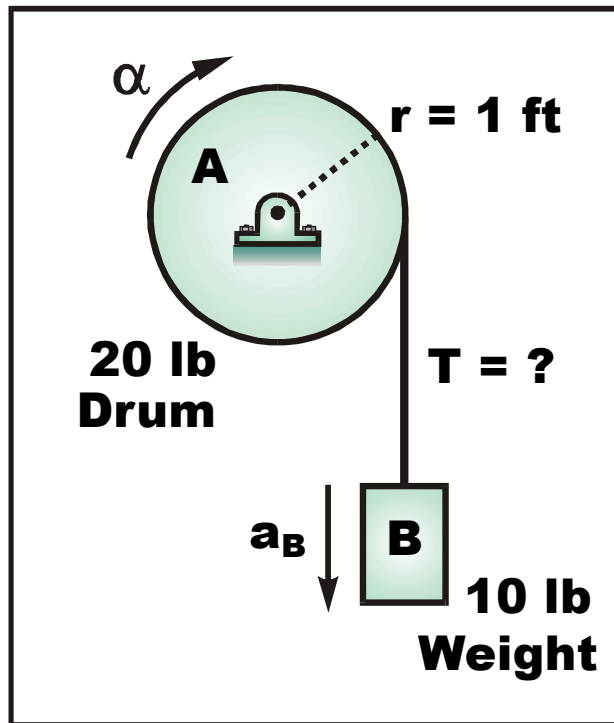


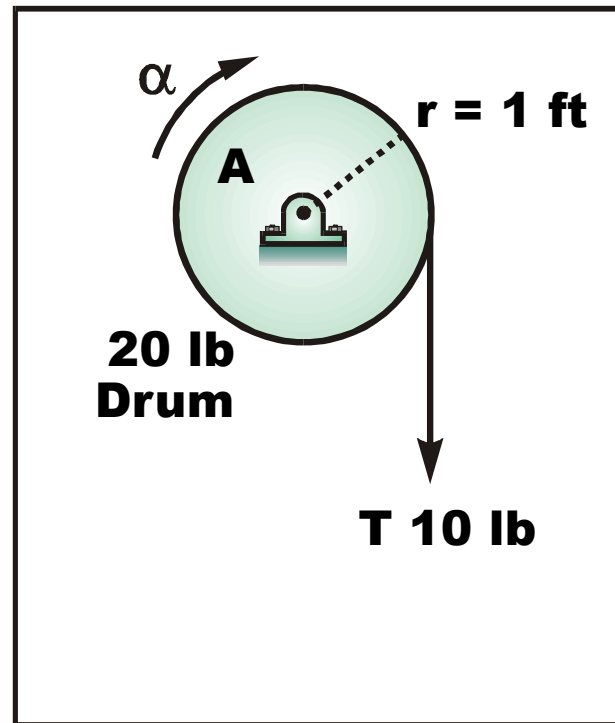
Rigid Body $F=ma$ Fixed Axis Rot'n: Example 1

This example illustrates a very important principle that you must understand. Two identical 20 lb drums are shown below. A cable wraps around each. From one cable hangs a 10 lb weight B. A 10 lb force is applied to the other. Please determine: (a) The tension in the cord for case 1; (b) The α 's for the drums in both cases.

Case 1: 10 lb Weight

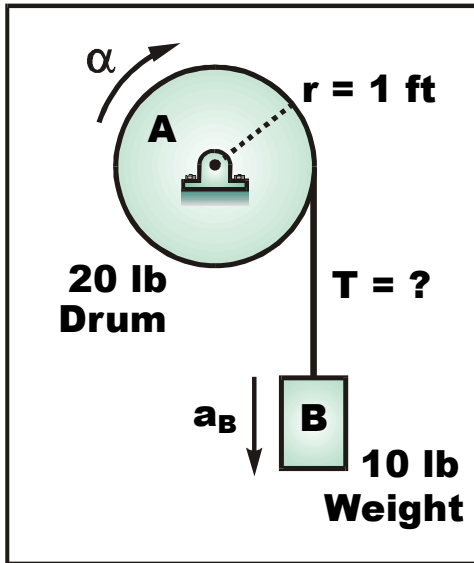


Case 2: 10 lb Force

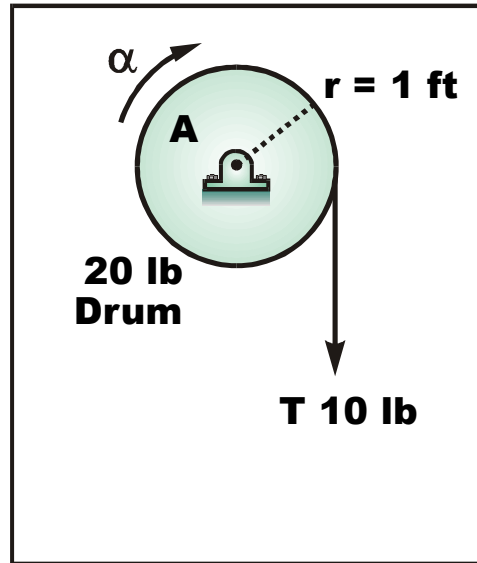


Before working this, think about it. Do you think $T_1 = 10$ lbs? Do you think the α 's are the same?

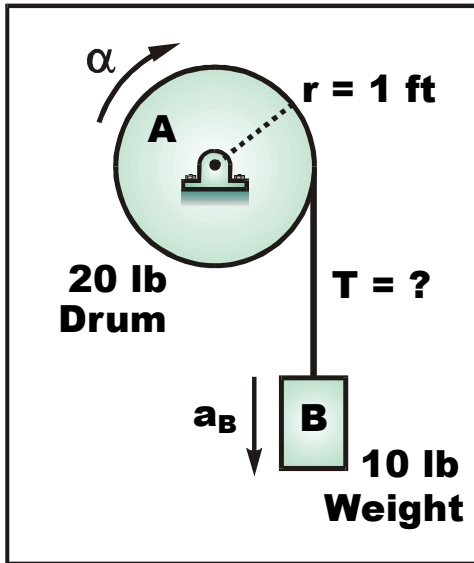
Case 1: 10 lb Weight



Case 2: 10 lb Force



Case 1: 10 lb Weight



Case 2: 10 lb Force

