Single-Body Force Problems

1. Neal is stealing a refrigerator from the bank. The mass of the refrigerator is 173 kg and its kinetic friction has a magnitude of 254 N. How hard must he push it forward in order to accelerate it at 1.27 m/s^2?

2. Joe pulls up on a rope attached to a 5.5-kg bucket. The bucket accelerates at 2.1 m/s^2. With what force did Joe pull?