Assume the position

In the illustration, a 49 kg rock climber is climbing a "chimney." The coefficient of static friction between her shoes and the rock is 1.2; between her back and the rock it is 0.80. She has reduced her push against the rock until her back and her shoes are on the verge of slipping.

1. Draw a force diagram of the climber.

2. What is the magnitude of her push against the rock?

3. What fraction of her weight is supported by the frictional forces on her shoes?