Below are six cubes held at rest against a wall. The coefficients of friction between each cube and the wall are identical.

A B

5 kg

9 kg

120 N

110 N

C D

3 kg

140 N

2 kg

130 N

E F

3 kg

130 N

3 kg

120 N

a. Rank the cubes on the basis of the force of the wall acting on them.

Largest 1. \_\_\_\_\_\_ 2. \_\_\_\_\_\_ 3. \_\_\_\_\_\_ 4. \_\_\_\_\_\_ 5. \_\_\_\_\_\_ 6. \_\_\_\_\_\_ Smallest

\_\_\_\_\_ The ranking can not be determined based on the provided information.

Explain the reason for your ranking:

b. Rank these cubes on the basis of the frictional force acting on them.

Largest 1. \_\_\_\_\_\_ 2. \_\_\_\_\_\_ 3. \_\_\_\_\_\_ 4. \_\_\_\_\_\_ 5. \_\_\_\_\_\_ 6. \_\_\_\_\_\_ Smallest

\_\_\_\_\_ The ranking can not be determined based on the provided information.

Explain the reason for your ranking: