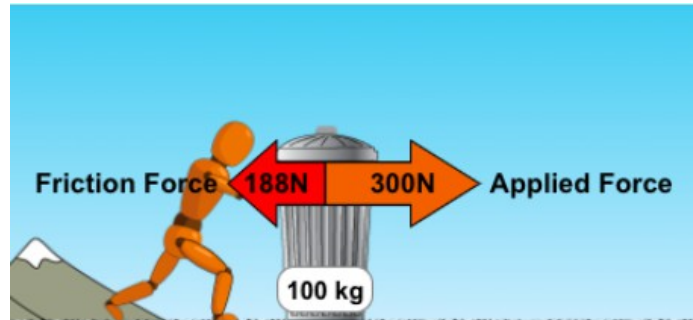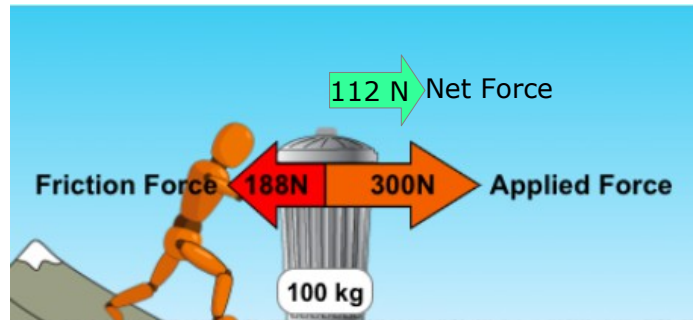QUESTION 4

Calculate the acceleration of the trash bin in the following diagram:

Answer this question in your notebook, and submit a photograph or scanned image of your work. In the text box, indicate the final answer with correct answers.

First, we need to calculate the net force:

$F_{net} = Applied\ Force - Friction\ Force = 300\ N - 188\ N = 112\ N$ *(Right)*

To calculate acceleration, we use the formula:

$$F = m \cdot a \rightarrow a = \frac{F}{m} \rightarrow a = \frac{112\ N}{100\ kg} = 1,12\ m/s^2$$