ANSWERS TO PROBLEMS IN UNIT 6 QUIZ

5. Draw a position-time graph for this story: assume that the girl's house is at position 0
A girl leaves her home for a walk and walks for 5 seconds until she is at 80 m from her
house. Then she checks her mobile phone and stays in the same position for 3 seconds.
Then she realizes she forgot her purse and runs home. She gets home after a 2 seconds
run.
Draw the graph in your notebook, make a picture or scan the image and submit your work.
You don't need to write anything in the text box below.

POSITION-TIME GRAPH
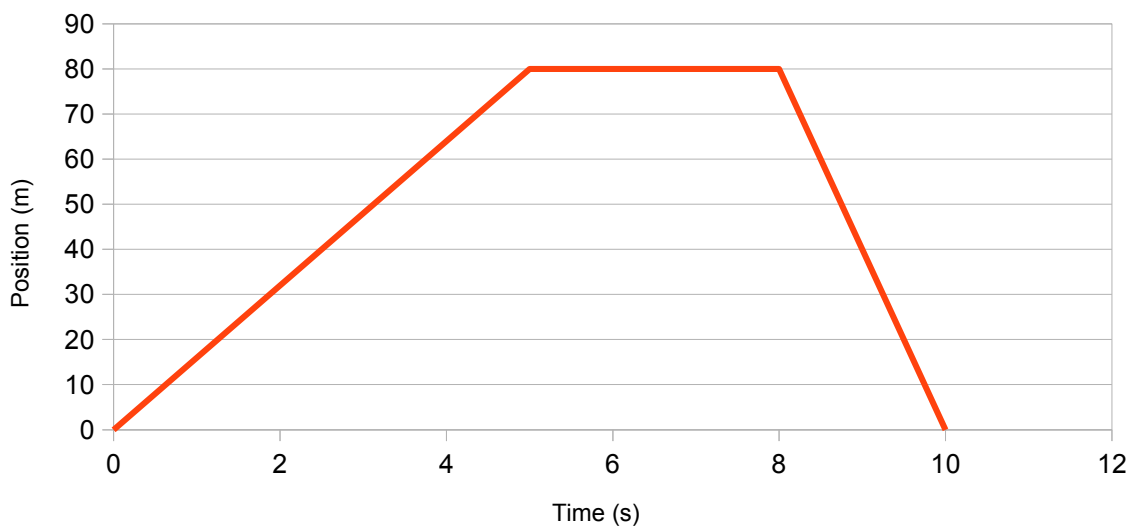
10. Calculate the net force and the acceleration of the box in the diagram below:
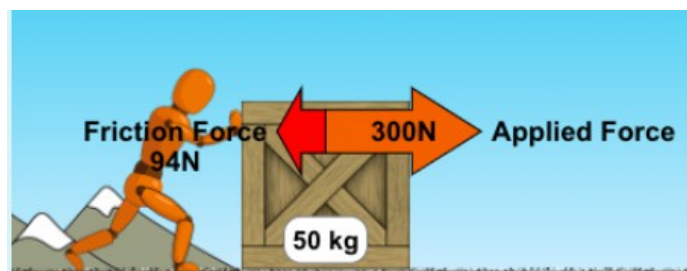
Answer the question in your notebook and submit a picture or scanned image of your
work.

F_{net} = Applied Force – Friction Force = 300 N – 94 N = **206 N**

F_{net} = m · a

a = F_{net} / m = 206 N / 50 kg = 4,12 m/s^2