

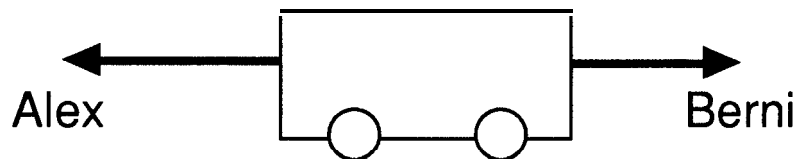
## Homework 31a Moving at speed

1. Use the words in the HELP-BOX to copy and complete the paragraph below.

slow	distance	force
increase		speed

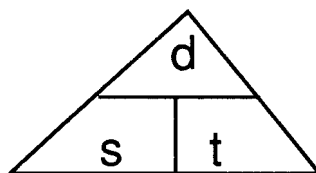
The speed of an object is the ..... it moves each second. For example, if you move 2 metres each second then your ..... is 2 m/s. If you accelerate then you ..... your speed. If you decelerate then you ..... down. An unbalanced ..... is needed to change the speed or direction of an object's motion.

2.



Alex and Berni are trying to pull a trolley in opposite directions. Alex pulls with a force of 50 N and Berni with a force of 40 N.

- (a) Which way will the trolley start to move? (To the left or right?)
  - (b) What is the size and direction of the resultant force on the trolley?
  - (c) Chris helps Berni to balance Alex's force. How much force does Chris use?
3. Use the triangle below to recall and write down the equations for speed, distance and time.



d = distance

s = speed

t = time

4. Describe fully how Ami could find out her average speed during her walk to school.