Subject 2

Please, do not write on the exam paper.

Each working day Peter normally rides his bike three kilometres from home to the railway station, takes the thirty-six minutes' train trip to town, and then rides his bike two kilometres downhill from the station to his work place at an average speed of twenty-four kilometres per hour.
The average speed of the train is one hundred kilometres per hour and the first bike ride takes nine minutes.

  a) What distance is the train trip?

  b) What average speed is the first bike ride?

  c) How long does the second bike ride take?

  d) What is the average speed for Peter's trip from home to work?

  e) One day Peter drove his car to work. The trip was two kilometres shorter but the average speed was thirty-six kilometres per hour slower.

  How much longer did this car trip take?