31 Mr Lee and Mr Chan travelled 3440 km from Singapore to a town in Malaysia. They both left Singapore at 7.30 am and used the same route. Mr Lee took 43 hours to reach the Malaysian town. Mr Chan's average speed was 20 km/h less than Mr Lee's.

(a) Calculate Mr Chan's speed.

(b) At what time did Mr Chan reach the Malaysian town?

32 A cyclist cycled from Town A to Town B at a speed of 15 km/h and Town B to Town C at 16 km/h. The whole journey took 1.5 hours.

(a) Calculate the average speed of the cyclist, if the distances between Town A and B, and between Town B and C are the same.

(b) What is the total distance covered by the cyclist?

33 Mr Goh and Mr Wang are going to the zoo. They are driving at a uniform speed of 60 km/h and 72 km/h respectively.

(a) If the zoo is 90 km away, how long will Mr Goh take to reach the zoo?

(b) If they started off at the same point, how far apart would they be after 30 min?

34 A motorist travelled from Town A to Town B which were 420 km apart at a constant speed. If he took $3\frac{1}{2}$ hours altogether,

(a) what was his speed?

(b) what fraction of the journey had he covered after $1\frac{1}{2}$ hours?

35 A rectangular tank 3.6 m long, 2 m wide and 1.8 m high was $\frac{3}{8}$ filled with water. The water leaked from the container at a rate of 0.06 metres cube per second. What was the volume of water left at the end of one minute.

Skip this one

36 A taxi charges \$2.80 for the first 2 km of a journey. It charges \$0.20 for every additional 200 m up to a maximum of 5 km. Thereafter, it charges \$0.10 for every 220 m. Find the cost of travelling 15 km on the taxi.

37 Mr Chen travelled at a constant speed of 60 km/h on the way to work. He increased his average speed by 10 km/h on his way back home. The distance between his home and his office is 25 km.

(a) What was the total time he took travelling to and fro?

(b) What was the average speed from the whole journey? (Leave your answer to the nearest one.)

38 A lorry and a car were 300 km apart when they started travelling towards each other at 5.30 pm. The lorry was travelling at a constant speed of 60 km/h and it passed the car at 9 pm. What was the average speed of the car?

Note: "lorry" is British for "truck"

39 Mrs Tan drove from her home to the shopping centre at an average speed of 90 km/h. She took 45 min to get there. If she drove home afterwards at a speed of 60 km/h, how much longer did she take on her return journey?

40 Mr Wong left his house at 7.15 am and arrived at his office at 8.45 am.

(a) If the distance between his house and office was 96 km, what was his average speed for the whole journey?

(b) If he increased his speed by 16 km/h, at what time must he leave his house so that he would still arrive at his office at 8.45 am?

Section C

31 **(a)** 60 km/h **(b)** 57 hrs 20 min **32** **(a)** 15.5 km/h **(b)** 23.25 km

33 **(a)** $1\frac{1}{2}$ km **(b)** 6 km **34** **(a)** 120 cm/h **(b)** $\frac{3}{7}$

35 1.26 m^3 **36** \$10.07 **37** **(a)** 46 mins **(b)** 65 km/h

38 20 km/h **39** $22\frac{1}{2}$ minutes more **40** **(a)** 64 km/h **(b)** 7.33 am