Numeracy Year 9 - Week 7: Measurement; Chance and Data

Department of Education and Training

STUDENT WORKSHEET

Focus of the week

Calculating and applying rates in familiar contexts

Question 1 This graph shows how the speed of a racing car varies along a flat 3 kilometre track during its second lap. Speed of a racing car along a 3 km track (second lap)*** Speed (km/h) 180 160 14/5 120 100 80 60 Distance along the track (km) Starting Where was the lowest speed recorded during the second lap? At the starting line. At about 0.8 km. At about 1.3 km. Shade one bubble Halfway around the track. What can you say about the speed of the car between the 2.6 km and 2.8 km marks? The speed of the car remains constant. The speed of the car is decreasing. The speed of the car is increasing. The speed of the car cannot be determined from the graph.

Question 2

Tony drove 300 km in $4\frac{1}{2}$ hours.

His average speed for the first 180 km was 60 km per hour.

How long did he take to travel the last 120 km?

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hours

Question 3

1 Australian dollar buys 0.80 US dollars

How many US dollars could be bought with 50 Australian dollars using this exchange rate?

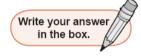
Write your answer in the box.

US dollars

Challenge Question

A car uses an average of 8 litres of fuel for every 100 km travelled.

At this rate, how many litres would the car use to travel 250 km?



litres