Speed, distance and time: 10 practice questions

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Name: _____ Date: _____

Attempt all questions and show your working. Suggested time: 15 to 20 minutes.

Section A: Consolidating (Questions 1-4)

Question 1

A car travels 180 km in 2 hours. Find its average speed.

Question 2

A cyclist rides at a steady 24 km/h for 3 hours. How far does she ride?

Question 3

How long does it take to drive 150 km at an average speed of 60 km/h? Give your answer in hours and minutes.

Question 4

Share $60 between Ella and Noah in the ratio 2 : 3.

Section B: Standard (Questions 5-10)

Question 5

A train travels at an average speed of 120 km/h for 45 minutes. How far does it travel?

Question 6

Josh walks from home to the shops. The table shows his distance from home at different times.

Time (minutes)	0	10	20	30	40	50
Distance from home (km)	0	1	2	2	2	3.5

He moves at a steady speed between any two times where his distance changes.

(a) Between which times was Josh not moving?

(b) Find his speed, in km/h, during the first 20 minutes.

(c) Find his speed, in km/h, during the last 10 minutes.

Question 7

A family drives 120 km in 1.5 hours, stops for lunch, then drives another 80 km in 1 hour. Not counting the lunch stop, find their average speed for the whole drive.

Question 8

Kate is paid $28.50 per hour for the first 38 hours she works in a week. For every hour over 38, she is paid time and a half (one and a half times her normal rate). How much is she paid for a week in which she works 42 hours?

Question 9

A cordial drink is made by mixing cordial and water in the ratio 1 : 4. How many millilitres of cordial are needed to make 2 litres of drink?

Question 10

On a particular day, 1 Australian dollar (AUD) buys 0.65 US dollars (USD).

(a) Convert 400 AUD to US dollars.

(b) Convert 520 USD to Australian dollars.

Speed, distance and time: answers

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Question 1

Answer: 90 km/h

Question 2

Answer: 72 km

Question 3

Answer: 2 hours 30 minutes (also accept 2.5 hours)

Question 4

Answer: Ella $24, Noah $36

Question 5

Answer: 90 km (120 × ¾)

Question 6

Answer: (a) from 20 to 40 minutes (b) 6 km/h (2 km in ⅓ h) (c) 9 km/h (1.5 km in ⅙ h)

Question 7

Answer: 80 km/h (200 ÷ 2.5)

Question 8

Answer: $1254 (38 × 28.50 = 1083, plus 4 × 42.75 = 171)

Question 9

Answer: 400 mL (⅕ of 2000 mL)

Question 10

Answer: (a) 260 USD (b) 800 AUD (520 ÷ 0.65)