3.9 Compound Measures: Speed, Density and Rates: 10-minute Pack

Calculators not allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A courier delivers parcels at a steady rate. She delivers 18 parcels in 45 minutes. Find the delivery rate in parcels per hour and then in parcels per minute. Give both answers.

(3)

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2 A recipe uses 300 g of flour to make 12 biscuits. Work out how many grams of flour are needed to make 20 biscuits. Then give the unit rate in grams of flour per biscuit.

(4)

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3 Convert 45 km/h to m/s.

(1)

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Mark scheme · 3.9 Compound Measures: Speed, Density and Rates: 10-minute Pack

Question 1

convert 45 minutes to hours or use proportion to find parcels per hour	M1
find parcels per minute as a second rate	M1
24 parcels/hour and 0.4 parcels/minute cao	A1

Answer: **24 per hour; 0.4 per minute**

Question 2

scale up 300 g for 12 to 20 biscuits or find unit rate first	M1
calculate flour for 20 biscuits	M1
500 g cao	A1
unit rate 25 g per biscuit cao	A1

Answer: **500 g; 25 g per biscuit**

Question 3

12.5 m/s cao	B1

Answer: **12.5 m/s**

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