1.13 – Speed, distance, time

Student name: _____ Score: _____

1. A bus leaves Afford at 07 55.
   It travels 15 km to Beetown at a speed of 50 km/h.

   Find the time the bus arrives in Beetown.

   ……………………………………… [3]

2. Joe is training for a triathlon.

   During one training session he
   - swims 1 km in 15 minutes,
   - cycles 20 km at a speed of 20 km/h,
   - runs at a speed of 8 km/h for 45 minutes.

   Calculate Joe's average speed for the training session.
   Give your answer in kilometres per hour.

   ……………………………………… km/h [3]

3. Wendy walks 9 km in $1\frac{1}{2}$ hours.
   She then runs 9 km in 45 minutes.

   Find her average speed in km/h for the whole journey.

   ……………………………………… km/h [3]

4. Alex drives 40 km to work at a speed of 50 km/h.
   He leaves home at 07 45.

   Find the time he arrives at work.

   ……………………………………… [3]

5. Dariella leaves home at 07 49 and takes 24 minutes to walk to school.

   (a) At what time does Dariella arrive at school?

   ……………………………………… [1]

   (b) The distance to school is 1.4 km.

   Calculate Dariella's walking speed.
   Give your answer in kilometres per hour.

   ……………………………………… km/h [2]

6. Change 12 metres per second into kilometres per hour.

   ……………………………………… km/h [2]

7. Sacha drove 425 km from home at an average speed of 100 km/h.

   (a) Calculate the time for the journey giving your answer in hours and minutes.

   .... h .... min [2]

   (b) The return journey took 3 hours and 55 minutes.
   She started at 21 56.

   At what time did she arrive home?

   .... [2]

8. A car travels 85 km in 50 minutes.

   Find the average speed of the car, giving your answer in km/h.

   ....km/h [2]

9. Erica walks 13 km in 2 hours.
   She then runs at a speed of 12 km/h for 45 minutes.

   Find her average speed in km/h for the whole journey.

   .... km/h [3]

10. A truck of length 10 m passes a gate of length 2 m.
    The speed of the truck is 8 m/s.

    Find the time the truck takes to completely pass the gate.

    .... s [2]

11. A car travels 300 metres in 20 seconds.

    Find the average speed of the car in

    (a) metres per second,

    .... m/s [1]

    (b) kilometres per hour.

    .... km/h [2]

12. A van has length 9 m.
    It takes 1 second for the van to completely pass a gate of length 1 m.

    Find the speed of the van.
    Give your answer in km/h.

    .... km/h [2]

13. Kendra jogs 7 km in 45 minutes.
She then runs at 12 km/h for 30 minutes.

Find her average speed in km/h for the whole journey.

.... km/h [3]

14. (a) Change 20 m/s into km/h.

.... km/h [2]

(b) A train travels at 20 m/s for 45 minutes.

Work out the distance travelled.
Give your answer in kilometres.

.... km [2]

15. Danny stands to watch a train go past.
The train has a length of 120 m and takes 3 seconds to pass.

Find the speed of the train

(a) in m/s,

.... m/s [1]

(b) in km/h.

.... km/h [2]

16. Xian walks 8 km in $1\frac{1}{2}$ hours.

She then runs 10 km in 45 minutes.

Find her average speed in km/h for the whole journey.

.... km/h [3]