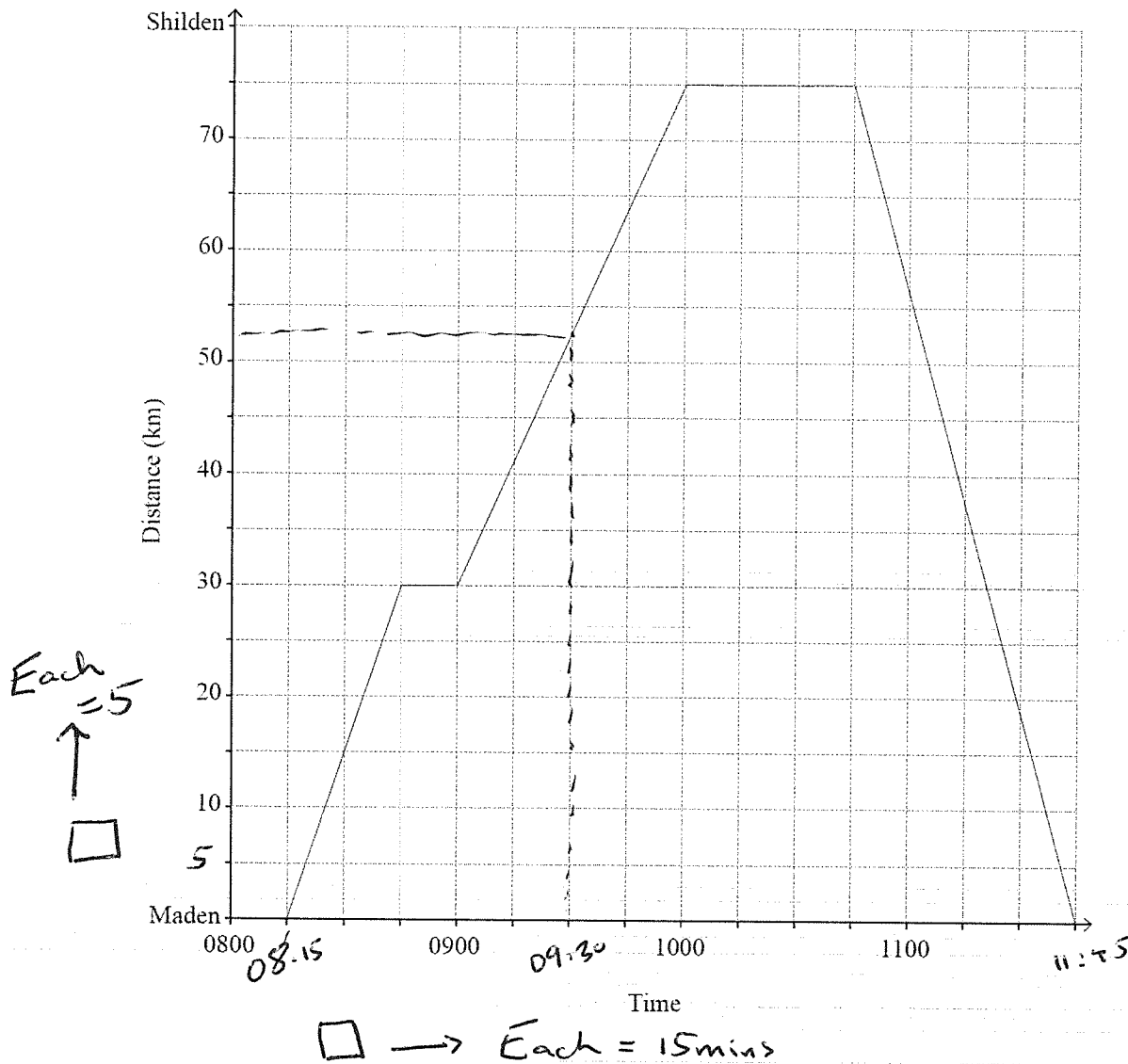


M7 = 31 days to go!

5 The graph shows Ryan's journey from Maden to Shilden and back to Maden.



(a) How far is Ryan from Maden at 0930?

Answer 55 km [1]

(b) Calculate the average speed for the whole journey.

Total Distance = $75 + 75$ "out there" then "come back"
 = 150 km

Total Time is $3\frac{1}{2}$ hrs

Answer 42.9 (km/h) [2] *che for formula*

150km in $3\frac{1}{2}$ hrs
 300km in 7 hrs

Speed = $\frac{150}{3.5} = 42.9$
 km/hr

- 8 There are four possible results from a music examination.

Result	Fail	Pass	Credit	Distinction
Probability	$\frac{3}{20}$	$\frac{1}{2}$ $\frac{10}{20}$	$\frac{3}{10}$ $\frac{6}{20}$	$\frac{1}{20}$

The probabilities of some results are recorded in the table.

- (a) What is the probability of fail?

All probabilities add to 1.

$$\frac{1}{2} + \frac{3}{10} + \frac{1}{20} + \frac{3}{10} + \frac{6}{20} + \frac{1}{20} = \frac{17}{20}$$

Answer $\frac{3}{20}$ [2]

- (b) What is the probability of credit or distinction?

$$p(\text{credit or distinction}) =$$

$$\frac{3}{10} + \frac{1}{20}$$

$$\frac{6}{20} + \frac{1}{20}$$

$$\frac{7}{20}$$

Answer $\frac{7}{20}$ [2]