Speed, Distance & Time: Medium Practice Paper 8 Answers

Q#	Answer	Explanation
1	D	The car covered 100 km in the four hours shown. Average speed counts the stop as part of the time, so it is 100 ÷ 4 = 25 km/h.
2	E	Reading the bars, the cheetah reaches 110 km/h and the horse 70 km/h. The difference is 110 − 70 = 40 km/h.
3	A	An hour holds 60 ÷ 6 = 10 lots of six minutes, and each one covers a kilometre. So the runner covers 10 km in an hour.
4	B	Fifteen minutes is a quarter of an hour, so the time is 2.25 hours. The average speed is 1,800 ÷ 2.25 = 800 km/h.
5	B	Starting 20 minutes late would make it 20 minutes late arriving, but making up 8 minutes cuts that to 20 − 8 = 12 minutes late. From 14:30 that gives 14:42.
6	C	Divide each distance by its speed: 120 ÷ 60 = 2, then 90 ÷ 30 = 3, 200 ÷ 80 = 2.5 and 150 ÷ 75 = 2 hours. The longest is journey B at 3 hours, even though it is the shortest distance.
7	C	In one hour the bus covers 54,000 metres, and an hour holds 3,600 seconds. So each second it covers 54,000 ÷ 3,600 = 15 metres.
8	A	One hour fifteen minutes is 1.25 hours. The distance is 84 × 1.25 = 105 kilometres.
9	D	The walk takes 15 ÷ 5 = 3 hours. Counting back three hours from the deadline, from 13:00 to 16:00 is 3 hours.
10	B	Between those times the line runs flat, so the distance from home stays at 90 km. That means the car was parked, not travelling.
11	D	Round the numbers to make the division easy: about 300 km at about 60 km/h. Since 300 ÷ 60 = 5, the journey takes roughly 5 hours.

12	E	In one hour they cover 50 + 40 = 90 kilometres between them, and every kilometre either drives closes the gap. So the gap shrinks to 180 − 90 = 90 kilometres.
13	C	He runs 200 ÷ 25 = 8 metres each second. A minute is 60 seconds, so he would cover 8 × 60 = 480 metres.
14	A	Read the first column from Ash to Dale. From 08:15 to 10:05 is 1 hour and 50 minutes.
15	E	Arriving half an hour earlier means covering the distance in 2 hours 30 minutes, which is 2.5 hours. The speed needed is 180 ÷ 2.5 = 72 km/h.