



## Time Management:

### Basic Skills

#### Section 1: Speed, Distance and Time (Basic)

1. Calculate the distance for the following **without a calculator**:
  - (a) Car driving 45mph for 2 hours
  - (b) Bike traveling at 18mph for 30 minutes
  - (c) Plane travelling at 350mph for 2 and a half hours
  - (d) A runner travelling 12mph for 1 hour and 15 minutes
  
2. Calculate the speed required for the following:
  - (a) To cover a distance of 80km in 4 hours.
  - (b) To cover a distance of 318 miles in 6 hours.
  - (c) To cover a distance of 33 miles in 45 minutes
  - (d) To cover a distance of 90km in 4 hours.
  
3. Calculate the time it would take to:
  - (a) Travel a distance of 90 miles at a speed of 60mph
  - (b) Travel a distance of 1200km at a speed of 80kmph
  - (c) Travel a distance of 12 miles at a speed of 16mph
  - (d) Travel a distance of 60 miles at a speed of 45mph

#### Section 2: Converting between Decimals and Hours and Minutes

1. Convert the following from minutes into decimals (use 2 decimal places if relevant)
  - (a) 6 minutes
  - (b) 12 minutes
  - (c) 50 minutes
  - (d) 40 minutes
  - (e) 5 minutes
  - (f) 9 minutes
  
2. Convert the following from hours and minutes into decimals (use two decimal places if relevant)
  - (a) 1 hours 20 minutes
  - (b) 2 hours 5 minutes
  - (c) 1 hour 45 minutes
  - (d) 3 hours 12 minutes
  - (e) 4 hours 10 minutes
  - (f) 2 hours 18 minutes
  - (g) 3 hours 33 minutes
  - (h) 5 hours 2 minutes
  
3. Convert the following from decimal hours into hours and minutes
  - (a) 0.5 hours
  - (b) 0.75 hours
  - (c) 0.1 hours
  - (d) 1.2 hours

- (e) 2.4 hours
- (f) 1.65 hours
- (g) 4.5833333333 hours
- (h) 1.833333 hours
- (i) 6.6666666 hours
- (j) 7.7 hours

### Context Questions

1. A bike is travelling at a speed of 15mph, calculate how far the bike would travel in 1 hour and 12 minutes.
2. A helicopter flies for 1 hour and 36 minutes. In this time, it travels 202 miles. On average how fast was it travelling during this time.
3. A train leaves Glasgow at 1022. It arrives in Aberdeen at 1404. Aberdeen and Glasgow are 255 miles away. Find the average speed of the train.
4. A bus goes a distance of 75km while traveling an average speed of 20km/hr. Calculate the time taken in hours and minutes.
5. A plane flies a speed of 450mph for a distance of 828 miles. Calculate the time taken in hours and minutes.
6. A lorry travels 122 kilometres at a speed of 48 km/hr. Calculate the time taken in hours and minutes.
7. It takes Simon 4 hours and 12 minutes to travel 252 miles. What is his average speed for this journey?
8. Grace runs at an average pace of 9 kmph for 2 hours and 36 minutes. How far does she get in this time?
9. How long would it take a train to cover 430 miles if it can average a speed of 50 mph? Answer in hours and minutes.
10. A bus leaves Glasgow at 1045 and is travelling to Cardiff which is 360 miles away. If the bus 80mph, when will it arrive in Cardiff?
11. A long distance runner travels at 1 kilometre per hour for a time of 3 hours 24 minutes. How far will it go in this time?
12. A fish travels a speed of 80 kilometres per hour. How far will it travel in 1 hours and 12 minutes?
13. A plane travels a distance of 1200 miles at a speed of 300 miles per hour.
  - (a) How long will this journey take?
  - (b) If the plane leaves at 1305 when will it arrive?
14. Simon travels a distance of 240 miles. If he left at 2100 and arrived at 0240. On average how fast did he travel?

15. The table below is a bus schedule.

	Bus 1	Bus 2	Bus 3	Bus 4
Glasgow	0735	1005	1355	1615
Lockerbie	0910	1135	1530	1800
Preston	1105	1322	1722	1955
Grantham	1425	1605	2005	2242
London	1608	1810	2215	0015



- How long does it take for Bus one to get from Glasgow to Preston
- How long does it take for Bus 4 to get from Grantham to London
- The average speed of Bus 2 to get from Preston to London was 52 miles per hour. Calculate the distance from Preston to London

16. On its journey round the Sun, The Earth travels a distance of approximately 585 000 000 miles. This journey takes one year. Calculate the speed of the Earth, give you answer in miles per hour.

17. Look at the following distance chart below

	HULL				
60		LEEDS			
47	72		LINCOLN		
97	44	85		MANCHESTER	
66	36	47	39		SHEFFIELD
38	24	80	71	57	YORK

- Write down the distance from Hull to Sheffield
- Hannah cycles from Leeds to York. Her average speed is 10 miles per hour. How long, in hours and minutes will the journey take?
- David drives from Lincoln to York. The journey takes 1 hour 15 minutes. Calculate his average speed.

### Exam Questions

- Amber is getting a flight from Glasgow to California. The flight includes a stop in New York. The flight from Glasgow to New York took 5 hours and 25 minutes. The flight from New York to California took 1 hour 55 minutes. California is 8 hours behind Glasgow. Amber's plane took off from Glasgow at 7:15pm. It landed in California at 7.50pm local time. Calculate how long the stop in New York was.

2. Alex is getting a flight from London to Tokyo.  
The flight includes a stop in Dubai.  
The flight from London to Dubai took 6 hours 15 minutes.  
The flight from Dubai to Tokyo took 3 hours 20 minutes.  
Tokyo is 9 hours ahead of London  
Alex's plane took off from London at 7.30am local time and arrived at 3.05am.  
How long was the stop in Dubai?
3. Beata is flying to Warsaw in Poland from Edinburgh. The plane leaves Edinburgh at 13.40. The flight takes 2 hours and 15 minutes. Warsaw is 2 hours ahead of Edinburgh. If it takes 50 minutes to get her luggage and through the airport, what is the earliest time that Beata should book a taxi for?
4. James is flying from Manchester to Johannesburg. The plane leaves Manchester at 15.30. The total journey time is 11 hours and 35 minutes as it included a stopover in Amsterdam. Johannesburg is 1 hour ahead of Manchester. What time did the plane land in Johannesburg?
5. Mrs Kennedy is working in a tower of offices in Berlin. The company she works for has other offices in London, New York and Beijing. It is currently 2.40pm in Berlin here are the times across all the offices.  
Berlin: 2.40pm  
London: 1.40pm  
New York: 9.40am  
Beijing: 9.40pm.  
Tomorrow Mrs Kennedy is going to have a conference call at 3.30pm in Berlin. If all the offices are open 9am-4pm. Which of the offices will not be open for the conference call?
6. **Non Calculator:** Fraser runs from 2.30pm to 2.50pm. On his phone it tells him his average speed was 2.5m/s. How far did he travel?
7. **Non Calculator:** A car travels a speed of 7.8m/s for 30 minutes. How far it travel?
8. **Non Calculator:** A bike travels 300m in 2 minutes, how fast did it travel in m/s?