

# Outcome 4 - Calculating Time

## Bronze example

Examples...

Time = Distance ÷ Speed

How long did a scooter take to travel 24 miles at an average speed of 6 m.p.h.?

Time =  $24 \div 6 = 4$  hours

## Silver example

Examples...

Time = Distance ÷ Speed

How long did a cruise ship take to travel 2000 miles at an average speed of 40 m.p.h.?

Time =  $2000 \div 40 = 50$  hours

## Gold example

Examples...

30 mins = 0.5 hr  
15 mins = 0.25 hr  
45 mins = 0.75 hr

Time = Distance ÷ Speed

How long did a train take to travel 700 miles at an average speed of 80 m.p.h.?

Time =  $700 \div 80 = 8.75$  hours = 8 hrs 45 mins

## Bronze Questions

Calculate the following times...

- |  |  |
|--|--|
| 1  D = 8 miles<br>S = 2 m.p.h. T = ?   | 2  D = 27 kilometres<br>S = 9 km/hr T = ?  |
| 3  D = 33 metres<br>S = 11 m/sec T = ? | 4  D = 55 kilometres<br>S = 11 km/hr T = ? |
| 5  D = 45 miles<br>S = 5 m.p.h. T = ?  | 6  S = 6 m.p.h.<br>D = 30 miles T = ?      |
| 7  D = 60 metres<br>S = 5 m/sec T = ?  | 8  S = 4 m.p.h.<br>D = 28 miles T = ?      |
| 9  D = 81 miles<br>S = 9 m.p.h. T = ?  | 10  S = 7 m.p.h.<br>D = 49 miles T = ?     |

## Silver Questions

Calculate the following times...

- |  |   |
|--|---|
| 1  D = 240 miles<br>S = 2 m.p.h. T = ?     | 2  D = 250 kilometres<br>S = 5 km/h T = ?     |
| 3  D = 1800 metres<br>S = 3 m/sec T = ?    | 4  D = 4000 miles<br>S = 8 m.p.h. T = ?       |
| 5  D = 5400 miles<br>S = 60 m.p.h. T = ?   | 6  D = 4500 kilometres<br>S = 900 km/hr T = ? |
| 7  D = 56 000 metres<br>S = 7 m/sec T = ?  | 8  D = 99 000 metres<br>S = 11 m/sec T = ?    |
| 9  D = 30 000 miles<br>S = 50 m.p.h. T = ? | 10  D = 36 000 miles<br>S = 600 m.p.h. T = ?  |

## Gold Questions

Calculate the following times...

- |   |  |
|---|--|
| 1  D = 385 miles.<br>S = 70 m.p.h. T = ?  | 2  D = 500 kilometres<br>S = 80 km/hr T = ?    |
| 3  D = 285 miles<br>S = 60 m.p.h. T = ?   | 4  D = 75 kilometres<br>S = 30 km/hr T = ?     |
| 5  D = 1750 miles<br>S = 200 m.p.h. T = ? | 6  D = 1875 miles<br>S = 300 m.p.h. T = ?      |
| 7  D = 180 miles<br>S = 40 m.p.h. T = ?   | 8  D = 900 miles<br>S = 120 m.p.h. T = ?       |
| 9  D = 517.5 miles<br>S = 90 m.p.h. T = ? | 10  D = 682.5 kilometres<br>S = 70 km/hr T = ? |

## Bronze Answers

- |               |             |
|---------------|-------------|
| 1. 4 hours    | 2. 3 hours  |
| 3. 3 seconds  | 4. 5 hours  |
| 5. 9 hours    | 6. 5 hours  |
| 7. 12 seconds | 8. 7 hours  |
| 9. 9 hours    | 10. 7 hours |

## Silver Answers

- |                |                 |
|----------------|-----------------|
| 1. 120 hours   | 2. 50 hours     |
| 3. 600 seconds | 4. 500 hours    |
| 5. 90 hours    | 6. 5 hours      |
| 7. 8 seconds   | 8. 9000 seconds |
| 9. 600 hours   | 10. 60 hours.   |

## Gold Answers

- |                  |                   |
|------------------|-------------------|
| 1. 5 hrs 30 mins | 2. 6 hrs 15 mins  |
| 3. 4 hrs 45 mins | 4. 2 hrs 30 mins  |
| 5. 8 hrs 45 mins | 6. 6 hrs 15 mins  |
| 7. 4 hrs 30 mins | 8. 7 hrs 30 mins  |
| 9. 5 hrs 45 mins | 10. 9 hrs 45 mins |