

Outcome 2 - Calculating Distance

Bronze example

Examples... 

S T

Distance = Speed × Time

How far did a boy walk in 2 hours at an average speed of 7 km/hr? 

Distance = $7 \times 2 = 14$ kilometres



Silver example

Examples... 

S T

Distance = Speed × Time

How far did a car drive in 8 hours at an average speed of 40 km/hr? 

Distance = $40 \times 8 = 320$ kilometres



Gold example

Examples... 

S T

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

Distance = Speed × Time

How far did a bus drive in 2 hours 15 mins at an average speed of 30 m.p.h.? 

Distance = $30 \times 2.25 = 67.5$ miles



Bronze Questions

Calculate the following distances...

- | | |
|--|---|
| 1  S = 8 m.p.h.
T = 4 hours D = ? | 2  S = 5 km/hr
T = 3 hours D = ? |
| 3  S = 10 m/sec
T = 4 seconds D = ? | 4  S = 9 km/hr
T = 5 hours D = ? |
| 5  S = 3 m.p.h.
T = 3 hours D = ? | 6  S = 11 m.p.h.
T = 6 hours D = ? |
| 7  S = 8 m/sec
T = 6 seconds D = ? | 8  S = 7 m.p.h.
T = 3 hours D = ? |
| 9  S = 12 m.p.h.
T = 9 hours D = ? | 10  S = 12 km/hr
T = 10 hours D = ? |



Silver Questions

Calculate the following distances...

- | | |
|---|---|
| 1  S = 30 m.p.h.
T = 9 hours D = ? | 2  S = 50 km/hr
T = 7 hours D = ? |
| 3  S = 60 m/sec
T = 20 seconds D = ? | 4  S = 90 km/hr
T = 10 hours D = ? |
| 5  S = 800 m.p.h.
T = 3 hours D = ? | 6  S = 700 m.p.h.
T = 9 hours D = ? |
| 7  S = 400 m/sec
T = 70 seconds D = ? | 8  S = 300 m/sec
T = 60 seconds D = ? |
| 9  S = 9000 m.p.h.
T = 4 hours D = ? | 10  S = 5000 km/hr
T = 80 hours D = ? |



Gold Questions

Calculate the following distances...

- | | |
|---|---|
| 1  S = 60 m.p.h.
T = 2 hrs 30 mins D = ? | 2  S = 30 km/hr
T = 4 hrs 15 mins D = ? |
| 3  S = 240 m.p.h.
T = 5 hrs 45 mins D = ? | 4  S = 360 km/hr
T = 6 hrs 30 mins D = ? |
| 5  S = 80 m.p.h.
T = 1 hr 30 mins D = ? | 6  S = 660 m.p.h.
T = 8 hrs 45 mins D = ? |
| 7  S = 880 m.p.h.
T = 3 hrs 15 mins D = ? | 8  S = 140 m.p.h.
T = 7 hrs 30 mins D = ? |
| 9  S = 40 m.p.h.
T = 2 hrs 45 mins D = ? | 10  S = 65 km/hr
T = 7 hrs 15 mins D = ? |



Bronze Answers

- | | |
|--------------|--------------------|
| 1. 32 miles | 2. 15 kilometres |
| 3. 40 metres | 4. 45 kilometres |
| 5. 9 miles | 6. 66 miles |
| 7. 48 metres | 8. 21 miles |
| 9. 108 miles | 10. 120 kilometres |

Silver Answers

- | | |
|------------------|------------------------|
| 1. 270 miles | 2. 350 kilometres |
| 3. 1200 metres | 4. 900 kilometres |
| 5. 2400 miles | 6. 6300 miles |
| 7. 28 000 metres | 8. 18 000 metres |
| 9. 36 000 miles | 10. 400 000 kilometres |

Gold Answers

- | | |
|---------------|-----------------------|
| 1. 150 miles | 2. 127·5 kilometres |
| 3. 1380 miles | 4. 2340 kilometres |
| 5. 120 miles | 6. 5775 miles |
| 7. 2860 miles | 8. 1050 miles |
| 9. 110 miles | 10. 471·25 kilometres |