|  |
| --- |
| **Converting Metric Units of Speed** |
| **(a)** | **(b)** | **(c)** | **(d)** |
| Convert$ 54$ km/h to m/s

|  |  |  |  |
| --- | --- | --- | --- |
|  | $54$ km | $1$ hour |  |
| $54000$ m | $1$ hour |
| $900$ m | $1$ minute |
| $15$ m | $1$ second |

 | Convert $90$ km/h to m/s

|  |  |
| --- | --- |
| $90$ km | $1$ hour |
| $90000$ m | $1$ hour |
|  | $1$ minute |
|  | $1$ second |

 | Convert $45$ km/h to m/s

|  |  |
| --- | --- |
| $45$ km | $1$ hour |
|  | $1$ hour |
|  | $1$ minute |
|  | $1$ second |

 | Convert $126$ km/h to m/s

|  |  |
| --- | --- |
| $126$ km | $1$ hour |
|  |  |
|  |  |
|  |  |

 |
| **(e)** | **(f)** | **(g)** | **(h)** |
| Convert$ 10$ m/s to km/h

|  |  |  |  |
| --- | --- | --- | --- |
|  | $10$ m | $1$ second |  |
| $600$ m | $1$ minute |
| $36000$ m | $1$ hour |
| $36$ km | $1$ hour |

 | Convert $2.5$ m/s to km/h

|  |  |
| --- | --- |
| 2.5 m | 1 second |
| 150 m | 1 minute |
|  | 1 hour |
|  | 1 hour |

 | Convert $30$ m/s to km/h

|  |  |
| --- | --- |
| $30$ m | $1$ second |
|  | $1$ minute |
|  | $1$ hour |
|  | $1$ hour |

 | Convert $7.5$ m/s to km/h

|  |  |
| --- | --- |
| $7.5$ m | $1$ second |
|  |  |
|  |  |
|  |  |

 |
| **(i)** | **(j)** |
| A car is travelling at $14$ m/s. The speed limit is $50$ km/h. Is the car breaking the speed limit? You must show your working. | A lorry travels at $x$ km/h. Find an expression for the speed of the motorbike in metres per second. |