

## Q1. (2022)

|      |                             |                                                                                              |   |                |
|------|-----------------------------|----------------------------------------------------------------------------------------------|---|----------------|
| 01.4 | $v = 348$                   | allow a value in the range 347 to 348                                                        | 1 | AO2<br>6.6.1.2 |
|      |                             | subsequent marks may only be awarded if value for $v$ is in the range 343 to 349             |   |                |
|      | $348 = 300 \times \lambda$  | allow a correct substitution using an incorrect value of $v$ read from graph                 | 1 |                |
|      | $\lambda = \frac{348}{300}$ | allow a correct rearrangement using an incorrect value of $v$ read from graph                | 1 |                |
|      | 1.16 (m)                    | allow 1.2 (m)<br>allow a correct calculation using an incorrect value of $v$ read from graph | 1 |                |
|      |                             | allow a maximum of <b>2</b> marks for use of $v = 330$ m/s                                   |   |                |