| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 11                 | Use of $v^2 = u^2 + 2 a s$ with $u = 0$ (1)<br>Substitutes $a = 0.38 g$ (1)<br>$\frac{v_{\text{M}}}{} = 0.62$ (1)   | 3    |
|                    | $ \frac{\text{Example calculation}}{v_{\text{M}}^2 = 0 + 2 \times 0.38  g  s} \\ v_{\text{E}}^2 = 0 + 2 \times g  s \\ \left(\frac{v_{\text{M}}}{v_{\text{E}}}\right)^2 = \frac{0.38 g s}{g s} = 0.38 \\ \frac{v_{\text{M}}}{v_{\text{E}}} = \sqrt{0.38} = 0.62 $ |      |
|                    | Total for question 11   | 3    |