<table>
<tr><th>Question number</th><th>Answer</th><th>Notes</th><th>Marks</th></tr>
<tr><td>7 (a)</td><td>ANY THREE
vibration / oscillation of (air) molecules / particles;
longitudinal;
directions of vibration and propagation are parallel;
compression / rarefaction /pressure wave;</td><td>need to include what is vibrating

no need to mention molecules / particles</td><td>3</td></tr>
<tr><td>(b) (i)</td><td>0.01 s</td><td>ALLOW 2 s.f. / 2 sig figs / 2 significant figures</td><td>1</td></tr>
<tr><td>(ii)</td><td>speed = distance / time</td><td>ACCEPT equivalent rearrangement
ACCEPT suitable abbreviations e.g. s = d/t or v = s/t
REJECT equation ‘triangles’ alone</td><td>1</td></tr>
<tr><td>(iii)</td><td><table><tr><th>Student</th><th>Mean time in s</th><th>Speed of Sound in m/s</th></tr><tr><td>Andrew</td><td>0.45</td><td>330</td></tr><tr><td>Kefe</td><td>0.5</td><td>300</td></tr></table></td><td>1 mark each correct COLUMN (ignoring sf);;
mean time values as shown in mark scheme
speed = 150/mean time (allow ecf)

1 mark for all significant figures correct;
(i.e. 2 s.f. in first row, 1 s.f. in second row)</td><td>3</td></tr>
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