

جداول:

جدول 1

| | | | | | | | | | | | | |
|-------------------------|------|-----|-----|------|-----|-----|-----|-----|-----|----|----|-----|
| $\Delta X (cm)$ | 2.6 | 2.6 | 2.6 | 5.1 | 5.1 | 5.1 | 6.9 | 6.9 | 6.9 | 10 | 10 | 10 |
| $\Delta t (ms)$ | 35 | 28 | 29 | 79 | 47 | 50 | 69 | 70 | 67 | 99 | 96 | 103 |
| $\Delta \bar{t} (ms)$ | 31 | | | 59 | | | 69 | | | 99 | | |
| $\bar{v} (\frac{m}{s})$ | 0.84 | | | 0.86 | | | 1 | | | 1 | | |

جدول 2

| | | | | | | | | | | | | | | | |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|
| $\Delta X (cm)$ | 20 | 20 | 20 | 40 | 40 | 40 | 60 | 60 | 60 | 80 | 80 | 80 | 100 | 100 | 100 |
| $\Delta t (ms)$ | 197 | 196 | 193 | 439 | 383 | 378 | 555 | 659 | 571 | 763 | 763 | 808 | 979 | 976 | 974 |
| $\Delta \bar{t} (ms)$ | 195 | | | 400 | | | 595 | | | 778 | | | 976 | | |
| $\bar{v} (\frac{m}{s})$ | 1 | | | 1 | | | 1 | | | 1 | | | 1.02 | | |

جدول 3

| | | | | | | | | | | | | |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| $\Delta X (cm)$ | 2.7 | 2.7 | 2.6 | 5.1 | 5.1 | 5.1 | 6.9 | 6.9 | 6.9 | 10 | 10.1 | 10 |
| $\Delta t (ms)$ | 166 | 142 | 132 | 235 | 225 | 210 | 271 | 282 | 278 | 336 | 353 | 353 |
| $\Delta \bar{t} (ms)$ | 147 | | | 223 | | | 277 | | | 347 | | |
| $\bar{v} (\frac{m}{s})$ | .18 | | | .23 | | | .25 | | | .29 | | |

$$M_0 = 222.0 \text{ gr}$$

$$m = 53.7 \text{ gr}$$

جدول 4

| | | | | | | | | | | | | |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| $\Delta X (cm)$ | 2.5 | 2.6 | 2.6 | 5.1 | 5.1 | 5.1 | 6.9 | 6.9 | 6.9 | 10 | 10 | 10 |
| $\Delta t (ms)$ | 208 | 177 | 170 | 282 | 285 | 251 | 309 | 315 | 304 | 435 | 421 | 414 |
| $\Delta \bar{t} (ms)$ | 185 | | | 273 | | | 309 | | | 423 | | |
| $\bar{v} (\frac{m}{s})$ | .14 | | | .19 | | | .22 | | | .24 | | |

$$M + M_0 = 256.4 \text{ gr}$$

$$m = 53.6 \text{ gr}$$

جدول 5

| | | | | | | | | | | | | |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| $\Delta X (cm)$ | 2.7 | 2.7 | 2.7 | 5.1 | 5.1 | 5.1 | 6.9 | 6.9 | 6.9 | 10 | 10 | 10 |
| $\Delta t (ms)$ | 200 | 204 | 223 | 293 | 307 | 305 | 327 | 334 | 305 | 383 | 404 | 398 |
| $\Delta \bar{t} (ms)$ | 209 | | | 302 | | | 322 | | | 395 | | |
| $\bar{v} (\frac{m}{s})$ | .13 | | | .17 | | | .21 | | | .25 | | |

$$M + M_0 = 306.5 \text{ gr}$$

$$m = 53.7 \text{ gr}$$

جدول 6

| | | | | | | | | | | | | | | | |
|-----------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| $\Delta X (cm)$ | 20 | 20 | 20 | 40 | 40 | 40 | 60 | 60 | 60 | 80 | 80 | 80 | 100 | 100 | 100 |
| $\Delta t (ms)$ | 717 | 710 | 733 | 1030 | 1023 | 1026 | 1280 | 1266 | 1265 | 1155 | 1117 | 1124 | 1298 | 1285 | 1221 |
| $\Delta \bar{t} (ms)$ | 720 | | | 1026 | | | 1270 | | | 1132 | | | 1268 | | |

$$M + M_0 = 318.8 \text{ gr}$$

