

$$Velocity = 331.45 + (0.6 \times Temperature \text{ } ^\circ\text{C})$$

$$Velocity = 331.45\text{m/s} + (0.6 \times 22^\circ\text{C})$$

$$Velocity = 344.65\text{m/s}$$

$$Time = \frac{Distance}{Speed}$$

$$Time = \frac{0.25\text{m}}{344.65\text{m/s}}$$

$$Time = 0.0007\text{s OR } \approx 725\mu\text{s}$$

$$\therefore Benchmark = 725\mu\text{s}$$