

Problem 69

An infant's pulse rate is measured to be 130 ± 5 beats/min. What is the percent uncertainty in this measurement?

Solution

To obtain the percent uncertainty, divide the uncertainty by the pulse rate and multiply by 100%.

$$\frac{5 \frac{\cancel{\text{beats}}}{\cancel{\text{min}}}}{130 \frac{\cancel{\text{beats}}}{\cancel{\text{min}}}} \times 100\% \approx 4\%$$