

$$\begin{aligned}
\Delta \frac{a}{b} &= \left| \frac{a}{b} \right| \sqrt{\left(\frac{\Delta a}{a} \right)^2 + \left(\frac{\Delta b}{b} \right)^2} \\
&= |2.5| \sqrt{0.05^2 + 0.25^2} \\
&= 0.6373774391990982
\end{aligned}$$