$$
\begin{aligned}
d^2 &= 4^{2.0} \\
&= 16.0
\end{aligned}
$$

$$
\begin{aligned}
\Delta\left(d^2\right) &= \left| d^2 \cdot 2 \cdot \frac{\Delta d}{d} \right| \\
&= |16.0 \cdot 2.0 \cdot 0.175| \\
&= 5.6
\end{aligned}
$$

$$
\therefore d^2 = 16.0 \pm 5.6
$$

$$
\begin{aligned}
5 \cdot d^2 &= 5.0 \cdot 16.0 \\
&= 80.0
\end{aligned}
$$

$$
\begin{aligned}
\Delta\left(5 \cdot d^2\right) &= \left|5 \cdot d^2\right| \sqrt{\left(\frac{\Delta 5}{5}\right)^2 + \left(\frac{\Delta d^2}{d^2}\right)^2} \\
&= |80.0| \sqrt{0.0^2 + 0.35^2} \\
&= 28.0
\end{aligned}
$$

$$
\therefore 5 \cdot d^2 = 80.0 \pm 28.0
$$

$$
\begin{aligned}
a + 5 \cdot d^2 &= 5 + 80.0 \\
&= 85.0
\end{aligned}
$$

$$
\begin{aligned}
\Delta\left(a + 5 \cdot d^2\right) &= \sqrt{\Delta\left(a\right)^2 + \Delta\left(5 \cdot d^2\right)^2} \\
&= \sqrt{0.25^2 + 28.0^2} \\
&= 28.00112
\end{aligned}
$$

$$
\therefore a + 5 \cdot d^2 = 85.0 \pm 28.00112
$$

$$
\begin{aligned}
log_{10}\left(a + 5 \cdot d^2\right) &= log_{10}\left(85.0\right) \\
&= 1.92942
\end{aligned}
$$

$$
\begin{aligned}
\Delta\left(log_{10}\left(a + 5 \cdot d^2\right)\right) &= \left| \frac{\Delta a + 5 \cdot d^2}{a + 5 \cdot d^2 \cdot ln\left(10\right)} \right| \\
&= \left| \frac{28.00112}{85.0 \cdot 2.30259} \right| \\
&= 0.14307
\end{aligned}
$$

$$
\therefore log_{10}\left(a + 5 \cdot d^2\right) = 1.92942 \pm 0.14307
$$

$$\begin{aligned} b + log_{10}\left(a + 5 \cdot d^2\right) &= 2 + 1.92942 \\ &= 3.92942 \end{aligned}$$

$$\begin{aligned} \Delta\left(b + log_{10}\left(a + 5 \cdot d^2\right)\right) &= \sqrt{\Delta\left(b\right)^2 + \Delta\left(log_{10}\left(a + 5 \cdot d^2\right)\right)^2} \\ &= \sqrt{0.5^2 + 0.14307^2} \\ &= 0.52007 \end{aligned}$$

$$\therefore b + log_{10}\left(a + 5 \cdot d^2\right) = 3.92942 \pm 0.52007$$

$$\begin{aligned} b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5 &= 3.92942 \cdot 5.0 \\ &= 19.64709 \end{aligned}$$

$$\begin{aligned} \Delta\left(b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5\right) &= \left|b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5\right| \sqrt{\left(\frac{\Delta b + log_{10}\left(a + 5 \cdot d^2\right)}{b + log_{10}\left(a + 5 \cdot d^2\right)}\right)^2 + \left(\frac{\Delta 5}{5}\right)^2} \\ &= \left|19.64709\right| \sqrt{0.13235^2 + 0.0^2} \\ &= 2.60033 \end{aligned}$$

$$\therefore b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5 = 19.64709 \pm 2.60033$$

$$\begin{aligned} \frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5} &= \frac{1.0}{19.64709} \\ &= 0.0509 \end{aligned}$$

$$\begin{aligned} \Delta\left(\frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}\right) &= \left|\frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}\right| \sqrt{\left(\frac{\Delta 1}{1}\right)^2 + \left(\frac{\Delta b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}\right)^2} \\ &= \left|0.0509\right| \sqrt{0.0^2 + 0.13235^2} \\ &= 0.00674 \end{aligned}$$

$$\therefore \frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5} = 0.0509 \pm 0.00674$$

$$\begin{aligned}\frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5} &= \frac{1.0}{19.64709} \\ &= 0.0509\end{aligned}$$

$$\begin{aligned}\Delta\left(\frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}\right) &= \left|\frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}\right| \sqrt{\left(\frac{\Delta 1}{1}\right)^2 + \left(\frac{\Delta b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5}\right)^2} \\ &= |0.0509| \sqrt{0.0^2 + 0.13235^2} \\ &= 0.00674\end{aligned}$$

$$\therefore \frac{1}{b + log_{10}\left(a + 5 \cdot d^2\right) \cdot 5} = 0.0509 \pm 0.00674$$