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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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