

題意より  $\begin{cases} 960 < 300a + 19b \leq 970 & \text{--- ①} \\ 1000 < 300a + 49b \leq 1010 & \text{--- ②} \end{cases}$

①②より  $\begin{cases} 49 \cdot 960 < 49 \cdot 300a + 19 \cdot 49b \leq 49 \cdot 970 & \text{--- ①'} \\ 19 \cdot 1000 < 19 \cdot 300a + 19 \cdot 49b \leq 19 \cdot 1010 & \text{--- ②'} \end{cases}$

①②'より  $49 \cdot 960 - 19 \cdot 1010 < 30 \cdot 300a < 49 \cdot 970 - 19 \cdot 1000$   
 $2785 < 900a < 2853$   
 $3.09... < a < 3.17$   
 $\therefore a = 3.1$

①②'より  $\begin{cases} 960 < \frac{930}{300} \frac{31}{10} + 19b \leq 970 \\ 1000 < \frac{930}{300} \frac{31}{10} + 49b \leq 1010 \end{cases}$   
 $\begin{cases} 30 < 19b \leq 70 \\ 70 < 49b \leq 80 \end{cases}$   
 $\begin{cases} 1.57... < b \leq 2.10... \\ 1.42... < b \leq 1.63... \end{cases}$

$\therefore b = 1.6$

$$\begin{array}{r} 49 \\ \times 96 \\ \hline 294 \\ 491 \\ \hline 4704 \end{array} \quad \begin{array}{r} 101 \\ \times 19 \\ \hline 909 \\ 101 \\ \hline 1919 \end{array} \quad \begin{array}{r} 4704 \\ - 1919 \\ \hline 2785 \end{array}$$

$$\begin{array}{r} 4704 \\ + 49 \\ \hline 4753 \end{array} \quad \begin{array}{r} 4753 \\ - 1900 \\ \hline 2853 \end{array}$$

$$900 \overline{) 2785} \quad 3.09$$

$$\begin{array}{r} 2700 \\ \hline 8500 \\ 8100 \\ \hline 400 \end{array}$$

$$900 \overline{) 2853} \quad 3.17$$

$$\begin{array}{r} 2700 \\ \hline 1530 \\ 900 \\ \hline 6300 \\ 6300 \\ \hline 0 \end{array}$$

$$19 \overline{) 30} \quad 1.57$$

$$\begin{array}{r} 19 \\ \hline 110 \\ 95 \\ \hline 150 \\ 133 \\ \hline 17 \end{array}$$

$$19 \overline{) 40} \quad 2.10$$

$$\begin{array}{r} 38 \\ \hline 20 \\ 19 \\ \hline 10 \end{array}$$

$$49 \overline{) 70} \quad 1.42$$

$$\begin{array}{r} 49 \\ \hline 210 \\ 196 \\ \hline 140 \\ 98 \\ \hline 42 \end{array}$$

$$49 \overline{) 80} \quad 1.63$$

$$\begin{array}{r} 49 \\ \hline 310 \\ 299 \\ \hline 160 \\ 147 \\ \hline 13 \end{array}$$