Exercise 2.

1. $\frac{2002}{8 \cdot 13} = \frac{2002}{104}$

1) $2002 = 104 \cdot 19 + 26$

$104 = 26 \cdot 4$

$\frac{2002}{8 \cdot 13} = [19, 4]$

2) $\frac{2002}{104} = 19 + \frac{26}{104} = 19 + \frac{1}{\left(\frac{104}{26}\right)} = 19 + \frac{1}{4}$

2. $\sqrt{8 \cdot 13} = \sqrt{104} = 10 + (\sqrt{104} - 10) =$

$= 10 + \frac{1}{\left(\frac{1}{\sqrt{104} - 10}\right)} = 10 + \frac{1}{\left(\frac{\sqrt{104} + 10}{104 - 100}\right)} =$

$= 10 + \frac{1}{\frac{\sqrt{104} + 10}{4}} = 10 + \frac{1}{5 + \frac{\sqrt{104} + 10 - 20}{4}} =$

$= 10 + \frac{1}{\left(\frac{\sqrt{104} - 10}{4}\right)} = 10 + \frac{1}{5 + \frac{1}{\left(\frac{4}{\sqrt{104} - 10}\right)}} =$

$= 10 + \frac{1}{5 + \frac{1}{\frac{4(\sqrt{104} + 10)}{104 - 100}}} = 10 + \frac{1}{5 + \frac{1}{\left(\frac{4(\sqrt{104} + 10)}{4}\right)}} =$

$= 10 + \frac{1}{5 + \frac{1}{20}} = [10, \overline{5, 20}]$