Exercise 2. $a = 2002$, $b = 2$, $c = 25$

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① I. $\frac{2002}{50} = [40; 25]$

$2002 = 40 \cdot 50 + 2$

$50 = 25 \cdot 2$

$НОД(2002, 50) = 2$

II. $\frac{2002}{50} = \frac{1001}{25} = 40 + \frac{1}{25} = [40; 25]$

Ответ: $[40; 25]$

② $\sqrt{50} = 7 + (\sqrt{50} - 7) = 7 + \frac{1}{\left(\frac{1}{\sqrt{50}-7}\right)} = 7 + \frac{1}{\left(\frac{\sqrt{50}+7}{(\sqrt{50}-7)(\sqrt{50}+7)}\right)} =$

$= 7 + \frac{1}{\left(\frac{\sqrt{50}+7}{1}\right)} = 7 + \frac{1}{\sqrt{50}+7} = 7 + \frac{1}{7 + (\sqrt{50} - 7) + 7} =$

$= 7 + \frac{1}{14 + (\sqrt{50} - 7)} = [7, \overline{14}]$

Ответ: $[7, \overline{14}]$