ex2

1. $\frac{2002}{7 \cdot 22} = \frac{2002}{154}$

I $2002 = 13 \cdot 154$

Возьмем $c = 23$

$\frac{2002}{7 \cdot 23} = \frac{2002}{161}$

I $2002 = 12 \cdot 161 + 70$

$161 = 2 \cdot 70 + 21$

$70 = 3 \cdot 21 + 7$

$21 = 3 \cdot 7$

$\frac{2002}{161} = [12; 2; 3; 3]$

II $\frac{2002}{161} = 12 + \frac{70}{161} = 12 + \frac{1}{\left(\frac{161}{70}\right)} = 12 + \frac{1}{2 + \frac{21}{70}} = 12 + \frac{1}{2 + \frac{1}{\left(\frac{70}{21}\right)}} =$

$= 12 + \frac{1}{2 + \frac{1}{3 + \frac{7}{21}}} = 12 + \frac{1}{2 + \frac{1}{3 + \frac{1}{3}}} = [12; 2; 3; 3]$

Ответ: $[12; 2; 3; 3]$

2. $\sqrt{7 \cdot 22} = \sqrt{154} = 12 + \sqrt{154} - 12 = 12 + \frac{1}{\left(\frac{(\sqrt{154} + 12)}{(\sqrt{154} - 12)(\sqrt{154} + 12)}\right)} =$

$= 12 + \frac{1}{\left(\frac{\sqrt{154} + 12}{10}\right)} = 12 + \frac{1}{2 + \left(\frac{\sqrt{154} + 12 - 20}{10}\right)} =$

$= 12 + \frac{1}{2 + \left(\frac{\sqrt{154} - 8}{10}\right)} = 12 + \frac{1}{2 + \frac{1}{\left(\frac{10}{\sqrt{154} - 8}\right)}} = 12 + \frac{1}{2 + \frac{1}{\left(\frac{10(\sqrt{154} + 8)}{90}\right)}} =$