$a = 2002$

$b = 08$

$c = 29$

I) $\frac{2002}{8 \cdot 29} = \frac{2002}{232}$

1) $2002 = 232 \cdot 8 + 146$

~~1152~~ $= 12$

$232 = 146 \cdot 1 + 86$

$146 = 86 \cdot 1 + 60$

$86 - 60 \cdot 1 + 26$

$60 = 26 \cdot 2 + 8$

$26 = 8 \cdot 3 + 2$

$8 = 2 \cdot 4$

$\frac{2002}{232} = [8, 1, 1, 2, 3, 4]$

$[8; 1; 1; 1; 2; 3; 4]$

2) $\frac{2002}{232} = 8 + \frac{86}{232} = 8 + \frac{1}{\left(\frac{232}{86}\right)} = 8 + \frac{1}{1 + \left(\frac{86}{146}\right)}$

$= 8 + \frac{1}{1 + \frac{1}{\left(\frac{146}{86}\right)}} = 8 + \frac{1}{1 + \frac{1}{1 + \frac{60}{86}}} =$

$$= 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{\left(\frac{66}{60}\right)}}} = 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \frac{26}{60}}}} =$$

$$= 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{\left(\frac{60}{26}\right)}}}} = 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{2 + \frac{8}{26}}}}} =$$

$$= 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{2 + \cfrac{1}{\left(\frac{26}{8}\right)}}}}} = 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{2 + \cfrac{1}{3 + \frac{2}{8}}}}}} =$$

$$= 8 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{2 + \cfrac{1}{3 + \cfrac{1}{4}}}}}} = [8; 1, 1, 1, 2, 3, 4]$$

Задача II

$$\sqrt{232} = 15 + \sqrt{232} - 15 = 15 + \frac{1}{\left(\frac{1}{\sqrt{232}-15}\right)\frac{\sqrt{232}+15}{\sqrt{232}+15}} =$$

$$15 + \frac{1}{\left(\frac{\sqrt{232}+15}{7}\right)} = 15 + \frac{1}{15 + \frac{\sqrt{232}-15}{7}} =$$

$$= 15 + \frac{1}{120 + \frac{1}{\left(\frac{7}{\sqrt{232}-15}\right)\frac{\sqrt{232}+15}{\sqrt{232}+15}}} =$$

$$15 + \frac{1}{120 + \frac{1}{840 + \left(\sqrt{232}-15\right)}} = [15, \overline{120, 840}]$$