

Задача 1

$$\frac{2002}{4 \cdot 14} = \frac{2002}{56} =$$

1 способ:

$$2002 = 35 \cdot 56 + 42$$

$$56 = 1 \cdot 42 + 14$$

$$42 = 3 \cdot 14$$

$$[35, 1, 3]$$

2 способ

$$\frac{2002}{56} = 35 + \frac{42}{56} = 35 + \frac{1}{\left(\frac{56}{42}\right)} = 35 + \frac{1}{1 + \frac{14}{42}} = 35 + \frac{1}{1 + \frac{1}{3}} =$$

$$= [35, 1, 3]$$

Задача 2

$$\sqrt{4 \cdot 14} = \sqrt{56} = 7 + (\sqrt{56} - 7) = 7 + \frac{1}{\left(\frac{1}{\sqrt{56} - 7}\right)} =$$

$$= 7 + \frac{1}{\frac{\sqrt{56} + 7}{(\sqrt{56} - 7)(\sqrt{56} + 7)}} = 7 + \frac{1}{\frac{\sqrt{56} + 7}{7}} = 7 + \frac{1}{2 + \frac{\sqrt{56} + 7 - 14}{7}} =$$

$$7 + \frac{1}{2 + \frac{\sqrt{56} - 7}{7}} = \cancel{7 + \frac{1}{2 + \frac{\sqrt{56} - 7}{7}}}$$

$$= 7 + \frac{1}{2 + \frac{1}{\left(\frac{7}{\sqrt{56} - 7}\right)}} = 7 + \frac{1}{2 + \frac{1}{\frac{\cancel{7}(\sqrt{56} + 7)}{\cancel{7}}}} = 7 + \frac{1}{2 + \frac{1}{14 + (\sqrt{56} - 7)}} =$$

$$= [7, \overline{2, 14}]$$