

$$\textcircled{8} \quad \frac{5}{7} = 0.\overline{71285}$$

$$\frac{9}{11} = 0.\overline{81}$$

reqd. irrational numbers

$$0.7201011110111111\dots$$

$$0.7301011110111111\dots$$

$$0.7401011110111111\dots$$

$$\textcircled{9} \text{ (i) } \sqrt{23} \quad \textit{irrational}$$

$$\text{(ii) } \sqrt{225}$$

$$= \sqrt{3^2 \times 5^2}$$

$$= 3 \times 5$$

$$= 15 \quad \textit{rational}$$

$$\text{(iii) } 0.3796 \quad \textit{rational} \quad [\because \text{dec. rep. is ter.}]$$

$$\textcircled{\text{IV}} \quad 7.478478\dots \quad \textit{rational} \quad [\because \text{dec. rep. is non ter. rep.}]$$

$$\textcircled{\text{V}} \quad 1.101001000100001\dots \quad \textit{irrational} \\ [\because \text{dec. rep. is non ter. non rep.}]$$