

30 2, 3

reqd. rational no = 2.1

reqd. irrational no.  $2.10101110111111\dots$

(ii)  $0, 0.1 = 0.00, 0.10$

reqd. rat. no. = 0.01

reqd. irr. no. =  $0.0101101110111111\dots$

(iii)  $\frac{1}{3}, \frac{1}{2}$

$$= \frac{2}{6}, \frac{3}{6}$$

$$= \frac{2}{6} \times \frac{10}{10}, \frac{3}{6} \times \frac{10}{10}$$

$$= \frac{20}{60}, \frac{30}{60}$$

reqd rat. no =  $\frac{21}{60}$

$$\frac{1}{3} = 0.33, \frac{1}{2} = 0.5$$

reqd irrational no.

$0.404044404444\dots$

(iv)  $-\frac{2}{5}, \frac{1}{2}$

$$= \frac{-4}{10}, \frac{5}{10}$$

reqd. rat. no. =  $\frac{3}{10}$

$$-\frac{2}{5} = -0.4, \frac{1}{2} = 0.5$$

reqd irrational no.

$0.20101110111111\dots$

(v)  $0.15, 0.16$

$$= 0.150, 0.160$$

reqd rational no. = 0.151

reqd irrational no =  $0.151011101111011111\dots$