

[illegible]

[illegible]

[illegible]

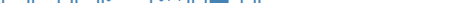
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

≤  11

[illegible]

$$\leq \frac{1}{\sqrt{\pi}} \left(\frac{1}{\sqrt{\pi}} + \frac{1}{\sqrt{\pi}} \right) = \frac{2}{\sqrt{\pi}}$$

$$\leq \frac{1}{n} \sum_{i=1}^n \left(\frac{1}{\pi_i} \log \frac{\pi_i}{\hat{\pi}_i} + \frac{1}{\pi_i} \log \frac{\pi_i}{\tilde{\pi}_i} \right)$$

$$\leq \frac{1}{\sqrt{\pi}} \left(\frac{1}{\sqrt{\pi}} + \frac{1}{\sqrt{\pi}} \right) = \frac{2}{\sqrt{\pi}}$$