$$Info_{income}(D) = \frac{4}{14}\left(-\frac{2}{4}\log_2\frac{2}{4} - \frac{2}{4}\log_2\frac{2}{4}\right)$$

$$+ \frac{6}{14}\left(-\frac{4}{6}\log_2\frac{4}{6} - \frac{2}{6}\log_2\frac{2}{6}\right)$$

$$+ \frac{4}{14}\left(-\frac{3}{4}\log_2\frac{3}{4} - \frac{1}{4}\log\frac{1}{4}\right)$$

$$= \frac{2}{7}\left(-\frac{1}{2}(-1) - \frac{1}{2}(-1)\right) + \frac{3}{7}\left(-\frac{2}{3}(\cdot 58) - \frac{1}{3}(-1.58)\right)$$

$$+ \frac{2}{7}\left(-\frac{3}{4}(-.415) - \frac{1}{4}(-2)\right)$$

$$= \frac{2}{7}\left(\cdot\frac{1}{2} + \frac{1}{2}\right) + \cdot 39 + \cdot 231$$

$$= \cdot 906.$$

$$\therefore \text{InfoGain}_{income} = Info_{(D)} - Info_{(income)}(D)$$

$$= \cdot 940 - \cdot 906$$

$$= \underline{\cdot 033.}$$