

$$\text{Info}(c) = -\left(\frac{3}{5} \log \frac{3}{5}\right) + \frac{2}{5} \log \frac{2}{5}$$

$$= .27$$

$$\text{Info}(\text{income}) = 0 + \frac{2}{5} \left(-\frac{2}{2} \log \frac{2}{2}\right) + \frac{2}{5} \left(-\frac{1}{2} \log \frac{1}{2}\right) + \frac{1}{5} \left(-\frac{1}{1} \log \frac{1}{1}\right)$$

$$= 0 + .12 + 0$$

$$\text{Ih}(\text{income}) = .27 - .12$$

$$= .17$$

$$\text{Ih}(\text{student}) = \text{---}$$

$$\text{Ih}(\text{credit}) = \text{---}$$