We know: 
$$E[E[x]] = E[x]$$
, so:  

$$E[(\hat{f}(x) - E[\hat{f}(x)])^{2}] + E[(E[\hat{f}(x)] - f(x))^{2}]$$

$$+ 2\{E[\hat{f}(x)] - E[\hat{f}(x)] - E[\hat{f}(x)] - E[\hat{f}(x)]\}$$

$$+ 2\{E[\hat{f}(x)] - E[\hat{f}(x)] - E[\hat{f}(x)]\}$$

$$+ 2\left[f(x) - E\left[f(x)\right] - E\left[f(x)\right] - E\left[f(x)\right]\right]$$

$$+ E\left[f(x) - E\left[f(x)\right]\right] + E\left[E\left[f(x)\right] - f(x)\right]$$

$$= E\left[\left(\hat{f}(x) - E\left[\hat{f}(x)\right]\right)^{2}\right] + E\left[\left(E\left[\hat{f}(x)\right] - f(x)\right)^{2}\right]$$
Variance
$$B_{jas}^{2}$$

$$= E\left[\left(\frac{f(x) - E\left[\frac{f(x)}{f(x)}\right]^{2}}{Variance}\right] + E\left[\left[E\left[\frac{f(x)}{f(x)}\right] - f(x)\right]^{2}\right]$$
For  $x = 0$ :-
$$= \left[\left(-\int_{a}^{a} f(x) + f(x)\right)^{2}\right] + \left[\left(-\int_{a}^{a} f(x) + f(x)\right)^{2}\right]$$

 $= E\left[\left(\left(\frac{1}{3}\right) - (0)\right)^{2}\right] = \frac{1}{9}$ 

$$E\left[\left(\frac{1}{f}(X) - E\left[\frac{1}{f}(X)\right]\right)^{2}\right] + E\left[\left(\frac{1}{f}(X)\right) - f(X)\right)^{2}\right]$$
For  $X = 0$ :-
$$Biax^{2} = E\left[\left(\frac{1}{f}(X = 0)|(X = 0)\right) - f((X = 0)|(X = 0))\right)^{2}\right]$$