(4)

$$bias^2 = \left(f^*(x_0) - \mathbb{E}_D[f_D(x_0)]\right)^2$$

$x_0 = 0$

$$\mathbb{E}_D[f_D(x_0)] = \frac{f_{D_1}(0) + f_{D_2}(0) + f_{D_3}(0)}{3} = \frac{0.2 + 0.3 + 0.7}{3} = 0.2$$

$$f^*(x_0) = \tan(0) = 0$$

$$\underline{bias^2 = (0 - 0.2)^2 = 0.04}$$

$$\text{Variance} = \mathbb{E}_D\left[\left[\mathbb{E}_D[f_D(x_0)] - f_D(x_0)\right)^2\right] = \frac{(0.2-0.2)^2 + (0.2-0.3)^2 + (0.2-0.7)^2}{3}$$

$$= \frac{0 + 0.01 + 0.01}{3} = \frac{1}{150} \simeq 0.007$$