

$$f_1 = \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{4}, \quad f_2 = \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{4}, \quad f_3 = \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{4}, \quad f_4 = \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{4}$$