



Current wealth.

$$w_1 = 1$$

Current bet.

$$x_2 = 0.5$$

Outcome.

$$c_2 = -\nabla f(x_2) = 1$$

New wealth.

$$w_2 = w_1 + c_2 x_2 = 1.5$$

New betting fraction.

$$\beta_3 = \frac{\sum_{i=1}^2 c_i}{3} = 0.6$$

New bet.

$$x_3 = \beta_3 w_2 = 1.$$