

Current wealth.

$$w_2 = 1.5$$

Current bet.

$$x_3 = 1$$

Outcome.

$$c_3 = -\nabla f(x_3) = 1$$

New wealth.

$$w_3 = w_2 + c_3 x_3 = 2.5$$

New betting fraction.

$$\beta_4 = \frac{\sum_{i=1}^3 c_i}{4} = 0.75$$

New bet.
$$x_4 = \beta_4 w_3 = 1.875$$