



Current wealth.

$$w_6 = 14.4375$$

Current bet.

$$x_7 = 12.375$$

Outcome.

$$c_7 = -\nabla f(x_7) = -1$$

New wealth.

$$w_7 = w_6 + c_7 x_7 = 2.0625$$

New betting fraction.

$$\beta_8 = \frac{\sum_{i=1}^7 c_i}{8} = 0.625$$

New bet.

$$x_8 = \beta_8 w_7 = 1.2890625$$