

130. Key: C

$$E\left[100(0.5)^X\right] = 100E\left[(0.5)^X\right] = 100E\left[e^{(\ln 0.5)X}\right] = 100M_X(\ln 0.5) = 100\frac{1}{1 - 2\ln 0.5} = 41.9$$