An American roulette wheel (pictured above) has 36 numbers on it (1-36), half of which are red, and half of which are black, plus two green numbers (0 and 00). Say you bet on red; you put up $1, and if a red number comes up you get your dollar back plus $1; if a red number doesn’t come up, you lose your dollar. What is the expected payoff in roulette? What is the standard deviation of the payoff? What is the coefficient of variation?

European roulette wheels have only one 0 (no 00). What is the expected payoff for this version of roulette? The standard deviation of the payoff? The coefficient of variation?