Let the random variable X represent the number of points gained in a single, randomly selected round of Game 1. Selecting exactly 2 of the four coins to be heads (and the rest consequently being tails), there are (4 choose 2 =) 6 states which satisfy the given condition and earn 3 points. The total sample space of results for Game 1 is of size (2^4 =) 16 (each coin is either heads or tails).

So $E[X] = 3 \times P(\text{exactly two heads})$

$= 3 \times \frac{6}{16}$ (as each result is equally likely)

$= 1.125$

Let the random variables X_1, X_2, X_3 represent the points gained from spinners 1, 2 and 3, respectively, in a single, randomly selected round of Game 2.

$$E[X_1 + X_2 + X_3] = E[X_1] + E[X_2] + E[X_3]$$

$$= \frac{1}{6} \times 2 + \frac{1}{6} \times 2 + \frac{1}{6} \times 2$$

$$= 1 < 1.125$$

$$= E[X]$$

So the expected earnings in a round of Game 1 are higher than the expected earnings in a round of Game 2. These expectations remain constant between rounds so, as the number of rounds played increases, the ratio of earnings (Game 1 : Game 2) tends towards (1.125 : 1). Therefore a wise player ought to favour Game 1 over Game 2.