

1. State the location of the entry in Pascal's triangle, and then give the value of ${}_{14}C_6$.

2. Find the probability of getting exactly 3 heads to appear in 6 tosses of a fair coin.
(Answer as decimal to nearest hundredth.)

3. Find the probability of getting either 4 or 5 heads to appear in 8 tosses of a fair coin.
(Answer as decimal to nearest hundredth.)

4. Find the 7th term in the expansion of $(c + d)^9$.

5. Find the 3rd term in the expansion of $(2k - j)^6$

6. Find the 12th term in the expansion $(x + 2)^{13}$

BONUS: Expand $(4x - 3y)^4$. You must show your work.