

Name:

QUIZ 8 - MATH IB HL

1. (10%) Write down the Pascal triangle for $n = 0$ to $n = 5$
2. (25%) Find the independent term in the binomial $\left(x + \frac{1}{x^3}\right)^{12}$
3. (25%) The coefficient of x^{-1} in the expansion of $\left(x a - \frac{2}{x}\right)^5$ is -5. Find the possible value(s) of a .

4. (20%) Find the term in x^2 in: $\left(\frac{1}{x} - x\right)^4 (3 - x^2)$

5. (20%) Find the term in x^2 in: $\left(\frac{1}{x} - x\right)^4 (3 - x)^2$