Pre-Calculus Math 30-1   Name: _____
Binomial Expansions

1. Find the value of n if the expansion of

    a) $(2x+3)^n$ has 18 terms   b) $(3x-5)^{4n-3}$ has 26 terms

2. Find the indicated term of each expansion.

    a) the fifth term of $(a-b)^5$ b) the second term of $(x-2)^6$

    c) the fourth term of $(a^2-2a)^7$ d) the middle term of $\left(2-\dfrac{x}{2}\right)^6$

3. The term that contains b^3 in the expansion of $(5-2b)^{12}$ is

4. The term that contains x^6 in the expansion of $(2x^2-9)^8$ is

5. Determine the value of m if one term in the expansion of $(x+m)^{11}$ is $-4455x^8$.

5. Find the constant term in the expansion of $\left(x-\dfrac{1}{x^3}\right)^{12}$.