## Binomial Expansion Worksheet #1

Expand each binomial raised to a power using Pascal's Triangle.

1. 
$$(x^4 + y)^3$$

2.  $(x - y)^4$ 

- 3.  $(3x+5y)^3$
- 4.  $(2x 3y^2)^5$

Find the indicated term:

- 5. The 3<sup>rd</sup> term of  $(x + y)^7$  6. The 6<sup>th</sup> term of  $(x 2y)^{10}$
- 7. The 10<sup>th</sup> term of  $(10x z)^9$  8. The 2<sup>nd</sup> term of  $(2x + 5y)^5$

9. For the data below round to the nearest hundredth is necessary.

7	5	3	9	6	6			
a) Find the ra	ange:	Mean		Median:	Mode:			
b) Find the v	ariance:			-				
c) Find the s								

50	60	54	54	50	62	52	52	40	40	31	55	50	Ī
----	----	----	----	----	----	----	----	----	----	----	----	----	---

10. For the data above, find the following. Round to the nearest hundredth if necessary.

a) Mean\_\_\_\_\_
b) Variance\_\_\_\_\_
c) Standard deviation\_\_\_\_\_