

Your TA: _____

Seat #: -

Math 105 TOPICS IN MATHEMATICS

QUIZ – II (In-Class)

February 9 (Mon), 2015

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ID #: _____

Name: _____

★ No calculator .

[I] (2pts) $3^3 =$ _____ . $(-5)^2 =$ _____ .

[II] (3pts) Fill concrete numbers in the boxes:

(1) $(x+y)^4 = x^4 + \boxed{4} x^3 y + \boxed{} x^2 y^2 + \boxed{} x y^3 + y^4$.

(2) If $a + b + c = 0$ then $a^3 + b^3 + c^3 = \boxed{} a b c$.

[III] (6pts) $\binom{4}{3} =$ _____ . $\binom{6}{2} =$ _____ . $\binom{7}{4} =$ _____ .

[IV] (2pts) $\binom{5}{0} + \binom{5}{1} + \binom{5}{2} + \binom{5}{3} + \binom{5}{4} + \binom{5}{5} = 2^{\boxed{}}$.

[V] (7pts) Circle all 2-to-the-powers among the numbers listed below.

4, 6, 8, 10, 12, 16, 24, 32, 36, 48,
54, 64, 72, 84, 96, 108, 128, 144, 216, 256.

