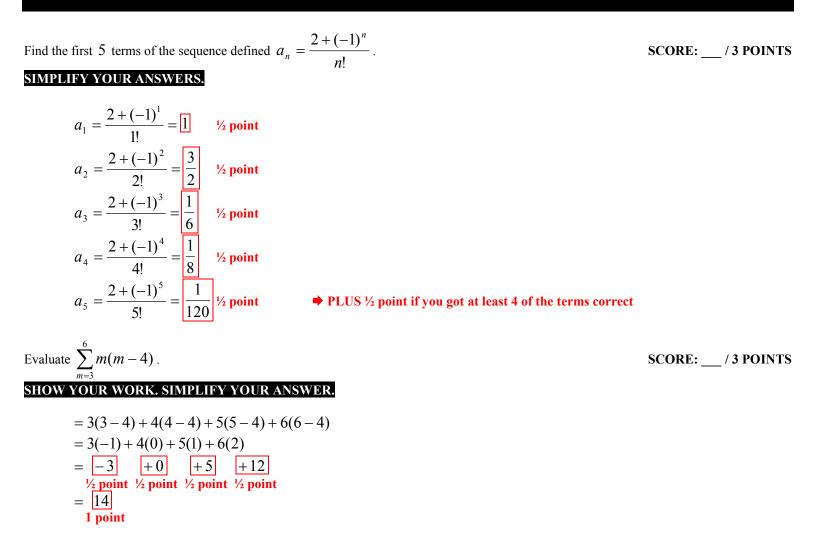
Math 43 (9:30am Class) Quiz 1 Version C Fri Jan 13, 2012

SCORE: ___ / 20 POINTS

WHERE INDICATED, YOU MUST SHOW THE WORK THAT LEAD TO YOUR ANSWER TO GET FULL CREDIT.



Find the first 4 terms of the sequence defined recursively by $a_1 = 2$, $a_k = 3k - a_{k-1}$ (for $k \ge 2$). SCORE: ____/ 3 POINTS

- **\Rightarrow** MINUS $\frac{1}{2}$ point if you forgot to write $a_1 = 2$
- $a_2 = 3(2) a_1 = 6 2 = 4$ 1 point

 $a_1 = 2$

- $a_3 = 3(3) a_2 = 9 4 = 5$ 1 point
- $a_4 = 3(4) a_3 = 12 5 = 7$ 1 point

Fill in the blanks: For the sum $\sum_{k=1}^{m} a_k$,

m is called the <u>upper limit of summation</u>,

k is called the index (OR dummy index) of summation, and

2 is called the <u>lower limit of summation</u>.

Find a general formula for the arithmetic sequence whose first term is 6, and whose sixth term is 14. SCORE: / 3 POINTS SHOW YOUR WORK.

