

NAME: \_\_\_\_\_

*A2.A.34: Represent the sum of a series, using sigma notation*

1. 060807b, P.I. A2.A.34

Which expression represents the sum of the sequence 3, 5, 7, 9, 11?

[A]  $\sum_{n=0}^5 (2n+1)$

[B]  $\sum_{n=1}^5 3n$

[C]  $\sum_{n=1}^5 (3n+1)$

[D]  $\sum_{n=1}^5 (2n+1)$

2. 080614b, P.I. A2.A.34

Jonathan's teacher required him to express the

sum  $\frac{2}{3} + \frac{3}{4} + \frac{4}{5} + \frac{5}{6} + \frac{6}{7}$  using sigma notation.

Jonathan proposed four possible answers.

Which of these four answers is *not* correct?

[A]  $\sum_{k=1}^5 \frac{k}{k+1}$

[B]  $\sum_{k=3}^7 \frac{k-1}{k}$

[C]  $\sum_{k=2}^6 \frac{k}{k+1}$

[D]  $\sum_{k=1}^5 \frac{k+1}{k+2}$

3. 060714b, P.I. A2.A.34

The expression  $1 + \sqrt{2} + \sqrt[3]{3}$  is equivalent to

[A]  $\sum_{n=1}^3 n^{-n}$

[B]  $\sum_{n=1}^3 \sqrt{n}$

[C]  $\sum_{n=0}^3 n^n$

[D]  $\sum_{n=1}^3 n^{\frac{1}{n}}$

*A2.A.34: Represent the sum of a series, using sigma notation*

[1] D \_\_\_\_\_

[2] A \_\_\_\_\_

[3] D \_\_\_\_\_