BECA / Dr. Huson / IB Math SL
27 April 2020
7.5 Homework: Sequences   Name:

Show work and upload to Gradescope. (you may answer on lined paper)

1. In an arithmetic sequence, the first term is 15 and the second term is 9.

   (a) Find the common difference.

   (b) Find the sixth term.

2. Given that for a geometric sequence $u_1 = 48$ and $u_2 = 36$

   (a) Find the value of r.

   (b) Find u_4.

3. The first three terms of an arithmetic sequence are $u_1 = 7.1$, $u_2 = 7.4$, and $u_3 = 7.7$.

   (a) Find the common difference.

   (b) Given that the kth term of the sequence, $u_k = 11$. Find k.