In-Class Activity

Use the formulas & concepts from pages 1145-1148 of the textbook to solve the following questions. Show your work step-by-step and explain any steps that are not obvious.

A.1-1 Find a simple formula for

**Start:**

**Apply Sum Rule:**

**Simplify First Summation:**

**Simplify 2nd Summation:**

**Combine both Simplified Summations:**

**Simplify Equation:**

**Final Answer:**

A.1-2 show that by manipulating the harmonic series.

**Start:**

**Simplify Denominator:**

**Sqrt Denominator:**

I don’t know how to get the answer from here. I at least got here.

You can neatly hand-write your answers and then scan and submit in Canvas. (Microsoft Word also has tools for entering formulas such as summations; however you don’t necessarily have to learn those for this assignment).