Quiz   **Name**
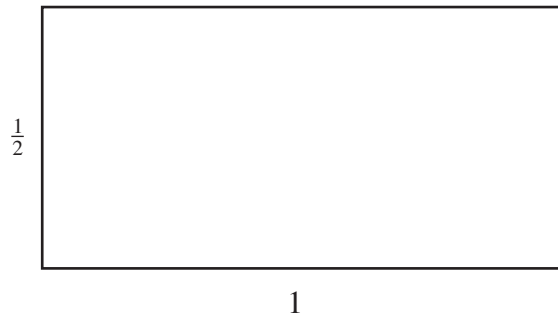
1. Write first $2^2 + 3^3 + 4^4 + 5^5$ and then $\frac{1}{2\cdot3} + \frac{1}{4\cdot5} + \ldots + \frac{1}{10\cdot11}$ in Sigma notation.

2. Divide the rectangle below into smaller rectangles in a way that illustrates that the infinite sum $\sum\limits_{k=1}^{\infty} \frac{1}{2^k}$ adds to $\frac{1}{2}$.

$\frac{1}{2}$

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3. Show that the infinite sum $\sum\limits_{k=0}^{\infty} \frac{1}{5^k}$ is equal to $1\frac{1}{4}$.