If $\{a_n\}$ is an infinite geometric series, and $|r| < 1$, then the sum of the infinite geometric series

$$\sum_{k=1}^{\infty} a_1 \cdot r^{k-1} = \frac{a_1}{1-r}$$

$$\sum_{k=1}^{\infty} a_1 \cdot r^{k-1} = \frac{a_1}{1-r}$$

Find the sum of the following geometric series...

$$1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \ldots$$

$$\sum_{k=1}^{\infty} a_1 \cdot r^{k-1} = \frac{a_1}{1-r}$$

Find the sum of the following geometric series...

$$81 + 27 + 9 + 3 + ...$$

$$\sum_{k=1}^{\infty} a_1 \cdot r^{k-1} = \frac{a_1}{1-r}$$

Find the sum of the following geometric series...

$$\frac{1}{3} + \frac{2}{3} + \frac{4}{3} + \frac{8}{3} + ...$$

If $\{a_n\}$ is an infinite geometric series, and $|r| < 1$, then the sum of the infinite geometric series

$$\sum_{k=1}^{\infty} a_1 \cdot r^{k-1} = \frac{a_1}{1-r}$$