

## General Series

Date \_\_\_\_\_ Period \_\_\_\_\_

**Rewrite each series using sigma notation.**

1)  $\frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \frac{4}{5} + \frac{5}{6}$

2)  $2 + 4 + 8 + 16 + 32 + 64$

3)  $4 + 2 + \frac{4}{3} + 1 + \frac{4}{5} + \frac{2}{3}$

4)  $1 + 2 + 3 + 4 + 5$

5)  $\frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \frac{4}{5} + \frac{5}{6} + \frac{6}{7}$

6)  $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} + \frac{1}{64}$

7)  $9 + \frac{9}{2} + 3 + \frac{9}{4}$

8)  $1 + 4 + 9 + 16 + 25$

9)  $\frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \frac{4}{5}$

10)  $1 + 2 + 3 + 4 + 5 + 6$

## Answers to General Series (ID: 1)

$$1) \sum_{m=1}^5 \frac{m}{m+1}$$

$$5) \sum_{m=1}^6 \frac{m}{m+1}$$

$$9) \sum_{m=1}^4 \frac{m}{m+1}$$

$$2) \sum_{m=1}^6 2^m$$

$$6) \sum_{a=1}^6 \frac{1}{2^a}$$

$$10) \sum_{m=1}^6 m$$

$$3) \sum_{n=1}^6 \frac{4}{n}$$

$$7) \sum_{n=1}^4 \frac{9}{n}$$

$$4) \sum_{m=1}^5 m$$

$$8) \sum_{m=1}^5 m^2$$