

Write the first four terms of the sequence whose general term is given.

1) $a_n = \frac{2^n}{(n+2)!}$

1) _____

A) $\frac{1}{3}, \frac{1}{6}, \frac{2}{15}, \frac{2}{45}$

B) $\frac{3}{2}, 1, \frac{8}{5}, \frac{3}{8}$

C) $\frac{2}{3}, 1, \frac{8}{5}, \frac{8}{3}$

D) $\frac{1}{3}, \frac{1}{6}, \frac{1}{15}, \frac{1}{45}$

Evaluate the factorial expression.

2) $\frac{7!}{5!2!}$

2) _____

A) 0!

B) 21

C) 7

D) 1

Find the indicated sum.

3) $\sum_{i=4}^7 6i$

3) _____

A) 66

B) 42

C) 132

D) 90

4) $\sum_{i=7}^{10} \frac{1}{i+6}$

4) _____

A) 58

B) $\frac{2400}{2401}$

C) $\frac{6061}{21840}$

D) $-\frac{487}{420}$

Write the first four terms of the sequence whose general term is given.

1) $a_n = \frac{3^n}{(n+2)!}$

1) _____

A) $1, \frac{9}{4}, \frac{27}{5}, \frac{27}{2}$

B) $1, \frac{9}{4}, \frac{27}{5}, \frac{2}{27}$

C) $\frac{1}{2}, \frac{3}{8}, \frac{9}{20}, \frac{9}{40}$

D) $\frac{1}{2}, \frac{3}{8}, \frac{9}{40}, \frac{9}{80}$

Evaluate the factorial expression.

2) $\frac{7!}{5!2!}$

2) _____

A) 21

B) 7

C) 0!

D) 1

Find the indicated sum.

3) $\sum_{i=1}^5 (i - 9)$

3) _____

A) -4

B) -30

C) -26

D) -12

4) $\sum_{i=5}^8 \frac{1}{i+1}$

4) _____

A) $-\frac{197}{840}$

B) 30

C) $\frac{156}{625}$

D) $\frac{275}{504}$

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B) $\frac{1}{3}, \frac{1}{6}, \frac{1}{15}, \frac{1}{45}$

C) $\frac{3}{2}, 1, \frac{8}{5}, \frac{3}{8}$

D) $\frac{1}{3}, \frac{1}{6}, \frac{2}{15}, \frac{2}{45}$

Evaluate the factorial expression.

2) $\frac{4!}{2!2!}$

2) _____

A) 0!

B) 1

C) 6

D) 4

Find the indicated sum.

3) $\sum_{i=1}^5 (i - 8)$

3) _____

A) -22

B) -10

C) -3

D) -25

4) $\sum_{i=9}^{12} \frac{1}{i+8}$

4) _____

A) $-\frac{646}{495}$

B) $\frac{6560}{6561}$

C) 74

D) $\frac{12617}{58140}$