

## Sigma notation

### Expand sigma

1. Expand and evaluate  $\sum_{k=1}^6 3k$ .

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2. Expand and evaluate  $\sum_{k=1}^4 2(k + 1)$ .

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## Find the sum

1. Find the value of  $\sum_{r=2}^{33} 5(3)^r$ .

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2. Find the value of  $\sum_{r=6}^{29} 4(2)^r$ .

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## Write sigma notation for arithmetic sequence

1. Consider the sum of the arithmetic sequence is  $4 + 11 + 18 + 25 + \dots + 95$ .

Write the sigma notation.

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2. Consider the sum of the arithmetic sequence is  $5 + 2 - 1 - 4 + \dots - 64$ .

Write the sigma notation.

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## Write sigma notation for geometric sequence

1. Consider the sum of the geometric sequence is  $4 + 8 + 16 + 32 + \dots + 2048$ .

Write the sigma notation.

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2. Consider the sum of the geometric sequence is  $\frac{1}{3} + \frac{1}{6} + \frac{1}{12} + \frac{1}{24}$

+ ... for n terms.

Write the sigma notation.

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