

Act. #20 Geometric Sequences AND Series

- 1) Find the next two terms for $-5, -15, -45, \dots$
- 2) Find the 10th term if $a_1 = 216$ and $r = -\frac{1}{3}$ (fraction form)
- 3) Find the geometric means of $4, \underline{\quad}, \underline{\quad}, \underline{\quad}, 64$.
- 4) Find a_7 for $80, \frac{80}{3}, \frac{80}{9}, \dots$
- 5) Evaluate:
$$\sum_{n=2}^{61} 3^{n-1}$$
- 6) Find the 47th term of the sequence $-3, -6, -9, \dots$
- 7) Find the 23rd term of $4, 8, 16, \dots$
- 8) Find the sum of the first four terms in
$$\sum_{n=1}^3 2^n$$
- 9) Find the common ratio for $\frac{3}{5}, \underline{\quad}, \underline{\quad}, \underline{\quad}, 375$.
- 10) Evaluate:
$$\sum_{n=1}^8 2 \cdot (-2)^{n-1}$$
- 11) A grab bag contains 10 packages worth \$1, 15 packages worth 50¢ AND 25 packages worth 25¢. If you pay 75 cents to pick one bag, what is your expected value.