

DO NOW

$$t_n =$$

$$S_n =$$

Given : $\sum_{n=1}^6 2(3)^{n-1}$

a) What does **sigma notation** represent: S_n or t_n ? (circle one)

b) Is this relationship arithmetic, geometric or neither?
(How do you know?)

c) What is t_1 ? _____

d) What is r ? _____

e) Evaluate the expression using the appropriate formula:

$$\sum_{n=1}^6 2(3)^{n-1}$$

$$t_n =$$

$$S_n =$$

1) Given the series $2 + 10 + 50 + 250 + \dots$, find S_{10} .

2) Find S_{20} of the geometric series $4 + 6 + 9 + 13.5 + \dots$

3) Identify t_1 and r and evaluate:

$$\sum_{n=1}^{12} 3(2)^n$$

4) Identify t_1 and r and evaluate:

$$\sum_{k=1}^5 4(2)^{k-1}$$

5) Evaluate:

$$\sum_{j=1}^{12} 7^{k-1}$$

6) How would you use summation notation to express the series $2 + 4 + 8 + 16 + 32$?

Homework: Text book

Arithmetic Seq and Series

p. 704: # 53, 65, 75 p. 711: # 27, 37

Geometric Seq and Series

p. 717-718: # 35, 43, 54, 60 p. 724: # 15, 49

Take Home QUIZ due **Wednesday**

Sequences and Series Unit TEST **Friday**