

Algebra II, Quiz 15.3-15.4

1) For what values of r does a geometric series converge?

For **2-5**, find S_3 , S_4 and the general formula for S_n . If the sequence converges, give the convergence value for S_n .

2) A geometric series with $a = 2$ and $r = 3$.

3) A geometric series with $a = 430$ and $r = 1/1000$

4) A geometric series with $a = .1$ and $r = 1/10$

5) A geometric series with $a = .11$ and $r = 1/100$

6) Explain why the convergence values for #4 and #5 are the same.

Review:

7) Solve $3x^2 - 4x + 5 = 0$

8) Solve $1100(1.045)^q = 1350(1.055)^q$