

**Mathematics 5**  
**Winter Term 2011**  
**The World According to Mathematics**

**Dwight Lahr**

**Weekly Schedule: Week #5**

Readings:

Lahr—6.5; 3.4, 3.5, 3.14, 3.15.

Exercises:

Monday 1/31—due:           • Exercise 6.5: 1

Wednesday 2/2—due:       • Geometric sums: review fr. Mon. class.  
Find the sums:           •  $1 + 1/3 + 1/9 + 1/27 +$   
                                   $1/81 + \dots$   
                                  •  $1/4 + 1/16 + 1/64 + \dots$

Friday 2/4—due               • Read 3.4  
                                  • Exercises 3.5: 2, 4, 6ade, 8, 9 [if you can,  
                                  otherwise postpone]

Friday 2/4—Hand in:       6.5: 3;  $3/4 + 9/16 + 27/64 + \dots = ?$ ; [next  
                                  week: postpone due to snow-- 3.5: 3, 4, 6c]

Friday discussion 2/4: Group Presentations—be there.

1. Kurt Gödel:

The Power of Mathematics: Is it limited?

2. Internet IP Address Management:

What are the issues? IPv4, IPv6, other technology?