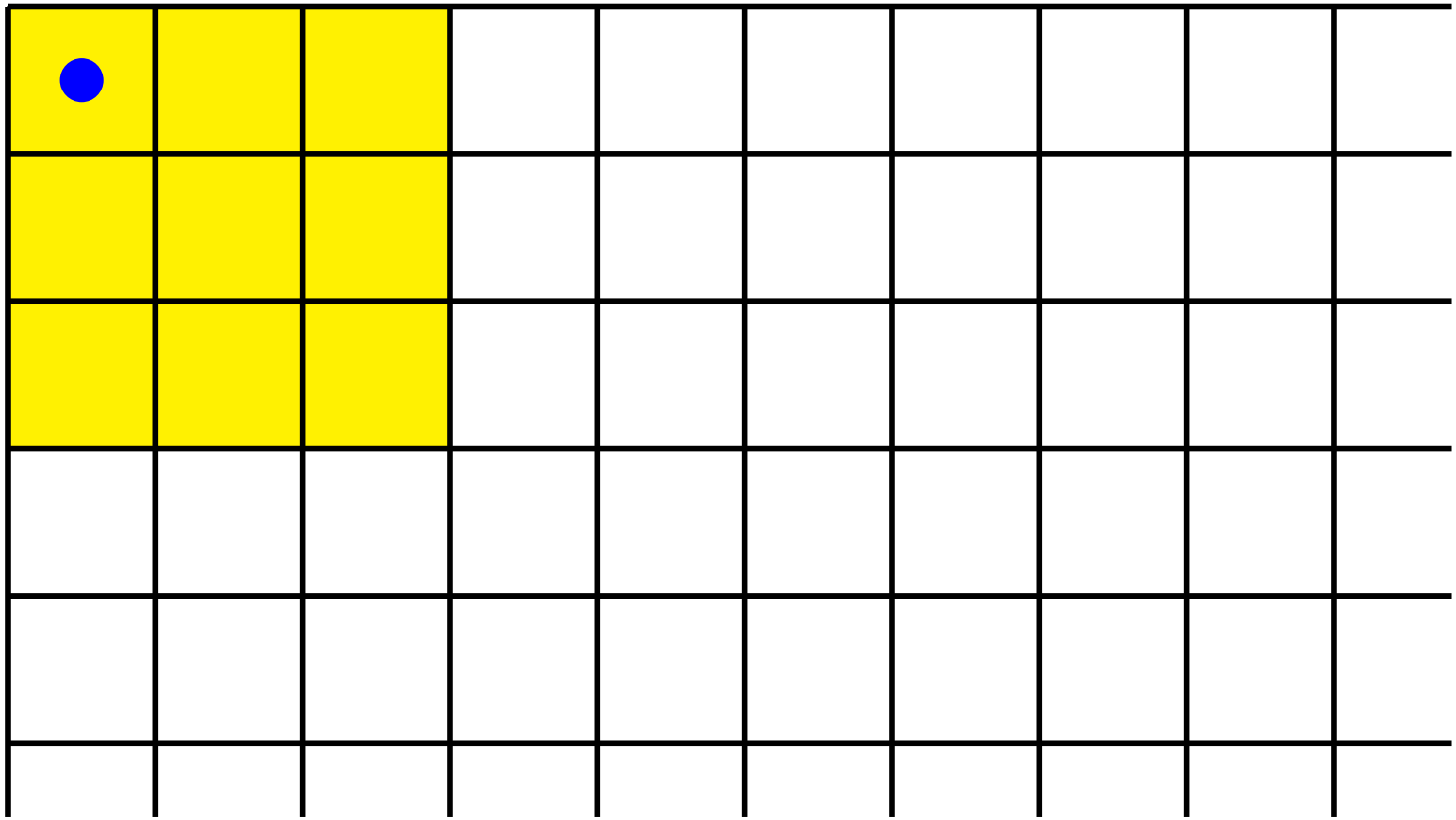
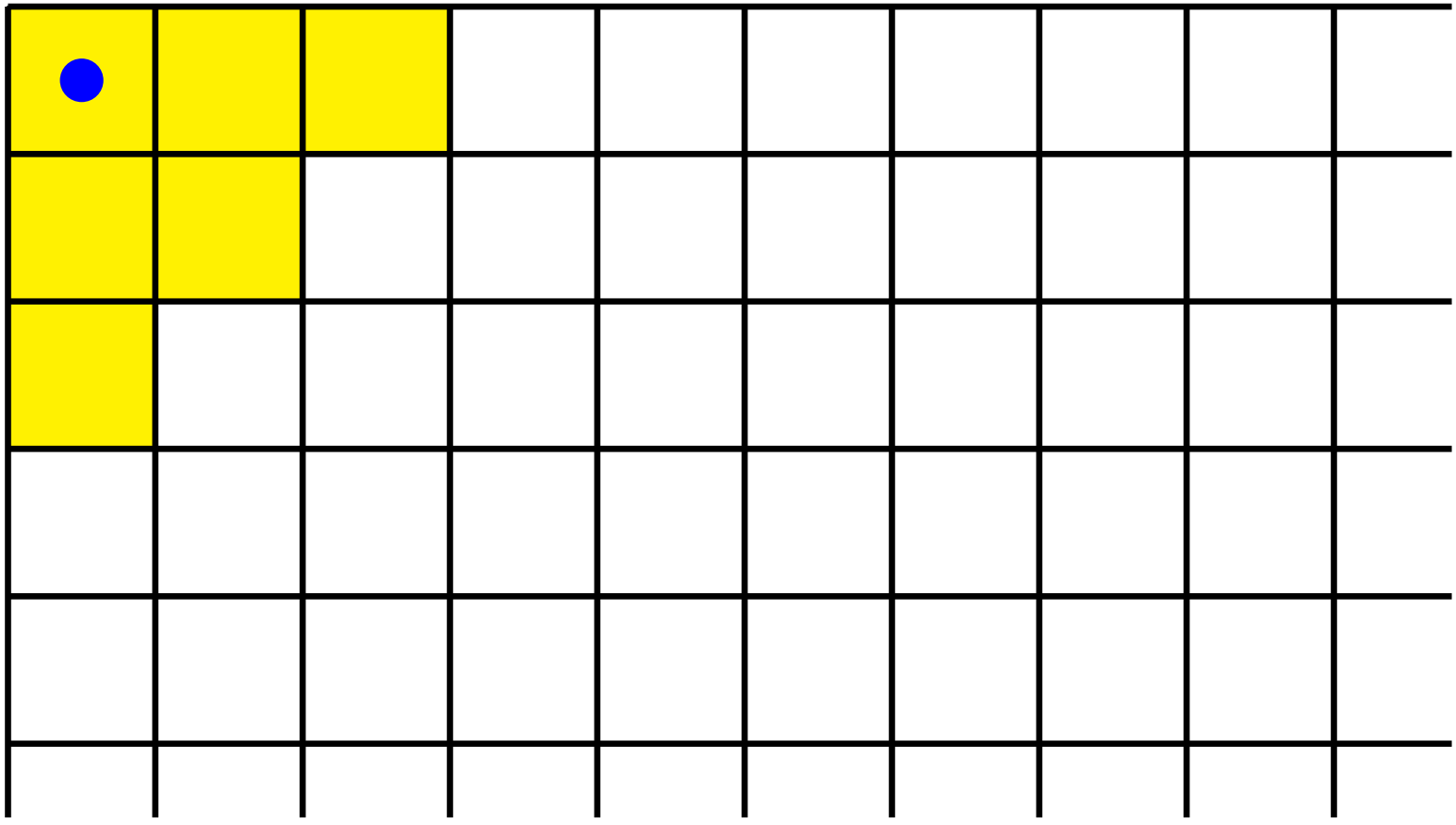
MAT137 - Calculus with proofs

- Test 5 opens on April 22
- Please fill out course evaluations. Deadline: today



- Start with one mushroom in top left corner
- You may remove a mushroom from a cell, and add mushrooms immediately E and S of it.
- You may not have two mushrooms on same cell.
- Goal: empty 3-by-3 corner



- **Challenge:** Empty the region of area 6 shaded above.

The last "Maclaurin" series: cotangent ?

$$\cot x = \frac{1}{x} - \frac{2}{\boxed{6}} x - \frac{2}{\boxed{90}} x^3 - \frac{2}{\boxed{945}} x^5 - \dots$$

$$\sum_{n=1}^{\infty} \frac{1}{n^2} = \frac{\pi^2}{\boxed{6}}, \qquad \sum_{n=1}^{\infty} \frac{1}{n^4} = \frac{\pi^4}{\boxed{90}}, \qquad \sum_{n=1}^{\infty} \frac{1}{n^6} = \frac{\pi^6}{\boxed{945}}$$

Thanks, and good luck!