

# Lines

**Problem 1.** In each of the following figures, find the total number of lines connecting the dots on the top line with the dots on the bottom line. Then find the total number of intersections that the lines make. Do you see any pattern to the progression?

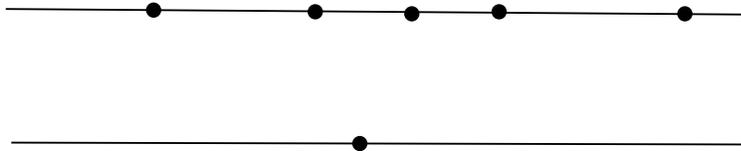


Figure 1: Number Lines:      Number Intersections:

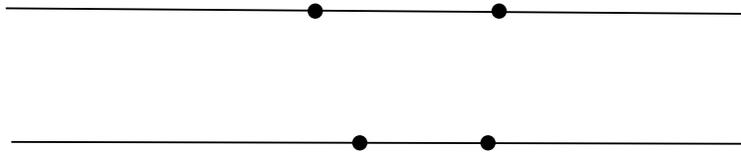


Figure 2: Number Lines:      Number Intersections:

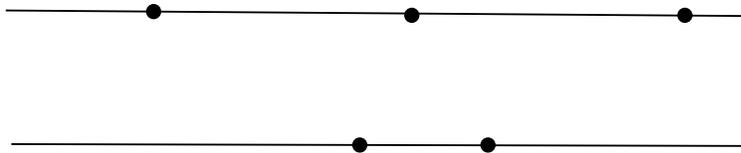


Figure 3: Number Lines:      Number Intersections:



Figure 4: Number Lines:      Number Intersections:



Figure 5: Number Lines:      Number Intersections:



Figure 6: Number Lines:      Number Intersections:



Figure 7: Number Lines:      Number Intersections:



Figure 8: Number Lines:      Number Intersections: