Algebra
Activity 1a - Multiplication via the FOIL Method

Part I

1. Multiply $\frac{21}{23}$

2. Multiply $(20 + 1)(20 + 3)$
   Explain why problems 1) and 2) are the same process.
   If you learned other ways to multiply two-digit numbers, show them to your group and explain why it is the same process as problems 1) and 2)

3. Multiply $(2x + 1)(2x + 3)$
   Explain why this is the same process as problems 1) and 2)
Part II

Expand the following:

1. \((x + 1)(x + 1)\)

2. \((x + 1)^2\)

3. \((x + 1)(x + 1)(x + 1)\)

4. \((x + 1)^3\)

5. \((x + 1)^4\)

6. \((x + 1)^5\)

Do you see a pattern?