

## Algebra and Representation HW #4

### 1. Telephone Numbers

Step 1: Find a calculator.

Step 2: Enter the first three digits of your phone number (NOT the area code).

Step 3: Multiply by 80.

Step 4: Add 1.

Step 5: Multiply by 250.

Step 6: Add the number made up of the last 4 digits of your phone number.

Step 7: Repeat Step 6.

Step 8: Subtract 250.

Step 9: Divide the result by 2.

What do you notice? **Explain** why this happens.

### 2. Create your own “Pick a Number” problem so that

- the final number is always the (most common) age of the students you teach, and
- all four operations ( $+$ ,  $-$ ,  $\times$ ,  $\div$ ) are used.