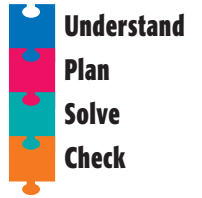


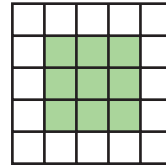
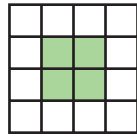
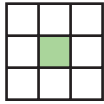
# Problem Solving Strategy

## Make a Table

NCTM Standards 1, 2, 6, 7, 8, 9, 10



- 1 Jenny made these designs with square tiles. Each design has a square of green tiles and a border of white tiles.



Circle the expressions that give the number of white tiles needed for a design with an  $n \times n$  green square.

$$4n + 4$$

$$4 \times (n + 1)$$

$$2 \times (n + 2) + 2n$$

- 2 Here is a pattern of columns of tiles.



Here are some expressions.

$$2 \times (n - 1)$$

$$2n + 2$$

$$2n - 2$$

If  $n$  is the number of orange tiles, which expressions give the number of white tiles?