## Who Has...?

The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables.

MATERIALS: deck of Who Has...? cards

**Groups:** small group to whole class

## Game:

Pass out the entire deck to students. Any student may begin by reading his or her card aloud. The student with the answer responds by reading his/her card. Play continues until all cards are used. Timed class competition is an option.

## Who Has...? cards

| I have 5 + 2x.                                                | I have 10x.                                                                           |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Who has a number 3 less than my number?                       | Who has my number decreased by 9x?                                                    |
| I have 2 + 2x.  Who has a number twice as large as my number? | I have x.  Who has the square of my number?                                           |
| I have 4x + 4.  Who has a number 4 less than my number?       | I have x <sup>2</sup> .  Who has the perimeter of an equilateral triangle of side 2x? |

| I have 4x.  Who has the square of my number?                                             | I have 6x.  Who has 6 more than my number?                                             |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| I have 16x <sup>2</sup> .  Who has my number increased by 9x <sup>2</sup> ?              | I have $6x + 6$ .  Who has $\frac{1}{6}$ of my number?                                 |
| I have 25 x <sup>2</sup> .  Who has the square root of my number?                        | I have x + 1.  Who has the square of my number?                                        |
| I have 5x. Who has twice my number?                                                      | I have $9x^2$ .  Who has a square root of my number?                                   |
| I have x² + 2x + 1.  Who has twice Mary's age three years ago if she is x years old now? | I have 3x.  If my number is the length of the side of a square, who has its perimeter? |
| I have 2x – 6.  Who has 6 more than my number?                                           | I have 12x.  Who has my value if $x = \frac{1}{4}$ ?                                   |

| I have 2x.                                            | I have 3.                                                                          |
|-------------------------------------------------------|------------------------------------------------------------------------------------|
| Who has the square of my number?                      | Who has 3x minus my number?                                                        |
| I have $4x^2$ .                                       | I have 3x − 3.                                                                     |
| Who has my number decreased by 1?                     | If I am the perimeter of an equilateral triangle, who has the length of each side? |
| I have $4x^2 - 1$ .                                   | I have x − 1.                                                                      |
| Who has a factor of my number?                        | If my number is squared, who has my middle term?                                   |
| I have 2x + 1.                                        | I have 25.                                                                         |
| Who has my number if $x = 4$ ?                        | Who has a number that is $4x^2$ less than my number?                               |
| I have 9.                                             | I have 25 – 4x <sup>2</sup> .                                                      |
| Who has the product of my number and the square of x? | Who has a factor of my number?                                                     |
| I have -2x.                                           | I have 36.                                                                         |
| If x = 3, who has the square of my number?            | Who has the largest perfect square less than my number?                            |