

# ALGEBRA 1

## Opening Quiz

### CONCEPTS & PROCEDURES

Practices 7 & 8

You drive 300 miles in 5 hours. How long will it take you to complete the entire trip of 1,020 miles?

### CRITICAL THINKING

Practices 1 & 6

In the expression below, what relationship between  $a$  &  $b$  will result in a quantity equal to one? Greater than one? Less than one?

$$\frac{x^a}{x^b}$$

### COMMUNICATE REASONING

Practice 2 & 3

Talk-a-Lot cell phone service offers a monthly plan of \$2 basic rate, plus 5 cents per minute. Talk-Some-More offers a monthly plan of \$5 basic rate, but only 3 cents per minute. Which plan is the least expensive and why?

### CONSTRUCT MODELS

Practices 4 & 5

The approximate distance that an object travels after being dropped is represented by the following equation  $d = 16t^2$ . What does this imply about the speed at which the object is falling?