

## Real-World Algebra Assignment

1. Sierra Custom Plumbing charges \$45 for a service call, plus an hourly rate of \$40.

a. What would Sierra Custom Plumbing charge for a job that takes three hours?

b. What would Sierra Custom Plumbing charge for a job that takes two-and-a-half hours?

c. What would be the cost if you called the plumber to your house and you were not home?

(Hint: Nothing in life is free.)

d. Write an algebraic expression for the cost of a plumbing service that takes  $h$  hours?

2. To send a package to Arcata, CA via Joe's Delivery Service it would cost you \$2.50 plus \$0.75 for each pound.

a. How much would it cost to send a two pound package?

b. How much would it cost to send a six pound package?

c. What would it cost to send a large 5-topping pizza?

d. Write an algebraic expression for the cost of sending a  $p$  pound package?

3. High Mountain Taxi in Aspen, CO charges \$3.50 at the flag drop (this is the base charge) plus \$1 per mile.

a. What would be the fare for a 15 mile cab ride?

b. What would be the fare from the airport into town? (the distance from the airport to town is seven miles)

c. What would be the round trip fare to the airport?

d. Write an algebraic expression for the fare of an  $m$  mile cab ride?