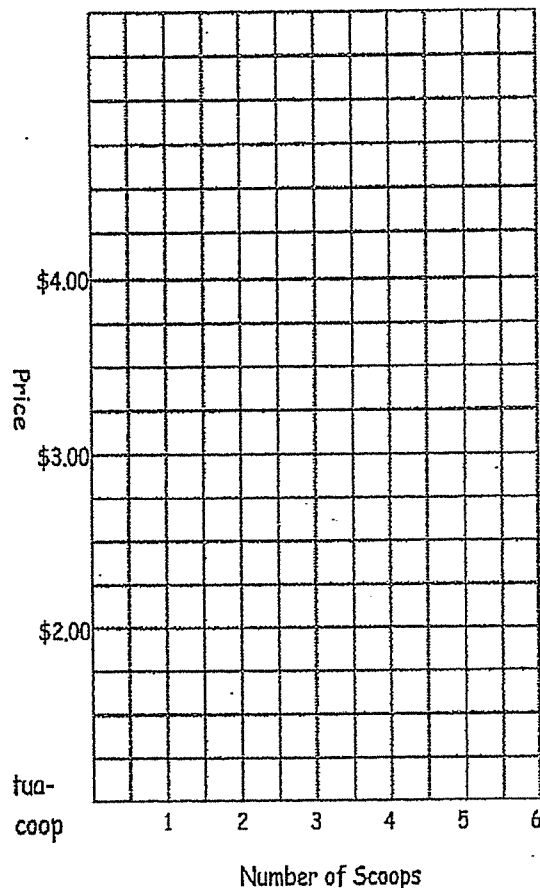


At Auntie Jane’s Ice Cream, the price of an ice cream cone with one scoop of ice cream is \$1.50. Additional scoops add \$0.75 each. At Cary’s Cones, a cone with one scoop is \$1.75 and additional scoops are \$0.50 each. Is there a number of scoops at which both shops charge the same? How many scoops and what is the price? When is the price lower at Auntie Jane’s? When is it lower at Cory’s?

| Number of Scoops | Price at Auntie Jane’s | Price at Cory’s |
|------------------|------------------------|-----------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

Prices of Ice Cream Cones



1. Complete the table and graph the data points.
2. Neither the table nor the graph allows you to easily see the solution of the system, but solving the system using algebraic symbols (equations) will give an exact solution.
3. Equations in point-slope form work well in this situation because the starting prices start with one scoop instead of zero.

At Auntie Jane’s, the price starts at \$1.50 and increases by \$0.75 for each scoop. What equation would describe this pricing?

4. Write a similar equation that describes the pricing at Cory’s.

5. We want to know when the scoops and prices are the same. Using algebraic symbols, we want to know when $y_A = y_C$.

6. Use the substitution method to solve this problem.