

- Ex 1** Jamaal manages a grocery store that carries two brands of cat food, a local brand obtained at the cost of 30 cents per can and a national brand obtained for 40 cents per can. He estimates that if the local brand is sold for  $x$  cents per can and the national brand for  $y$  cents per can, then approximately  $70 - 5x + 4y$  cans of the local brand and  $80 + 6x - 7y$  cans of the national brand will be sold each day. How should Jamaal price each brand to maximize total daily profit from the sale of cat food?