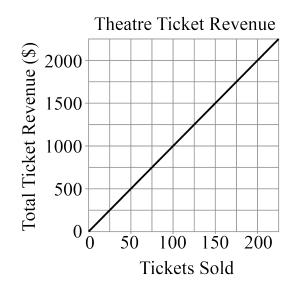
Problem of the Week Problem B Let's Go to the Movies

At a movie theatre, all tickets are the same price. The *ticket revenue* is the money the theatre gets from customers when they buy tickets. The line graph shows the total ticket revenue when different amounts of tickets are sold.



- (a) What is the total ticket revenue when 100 tickets are sold?
- (b) How much does one ticket cost?
- (c) The theatre has 250 seats in total. What is the total ticket revenue if they sell out?
- (d) The theatre is planning an open air movie for which they will charge the same price per ticket. If the open air space can hold 600 people, what is the maximum total ticket revenue for that show?
- (e) How can you tell from the graph that all tickets are the same price? Explain.

THEMES: ALGEBRA, DATA MANAGEMENT