Name_____ Period:_____ Date:_____

Directions: Use the information given to solve each problem.

1. Let $g(x) = 12x + 50$ represent the revenue function, where x is the number of concert tickets sold. Which statement is true of $g(100)$?

   A. It results in 1,250 and means that $1,250 was earned in revenue.

   B. It results in 1,250 and means that 1,250 tickets were sold.

   C. It results in 1,200 and means that $1,200 was earned in revenue.

   D. It results in 1,200 and means that 1,200 tickets were sold.

2. Let $h(x) = 8x - 20$ represent the cost function for producing x units of a product. Which statement is true of $h(50)$?

   A. It results in 380 and means that $380 is the total cost of production.

   B. It results in 380 and means that 380 units were produced.

   C. It results in 400 and means that $400 is the total cost of production.

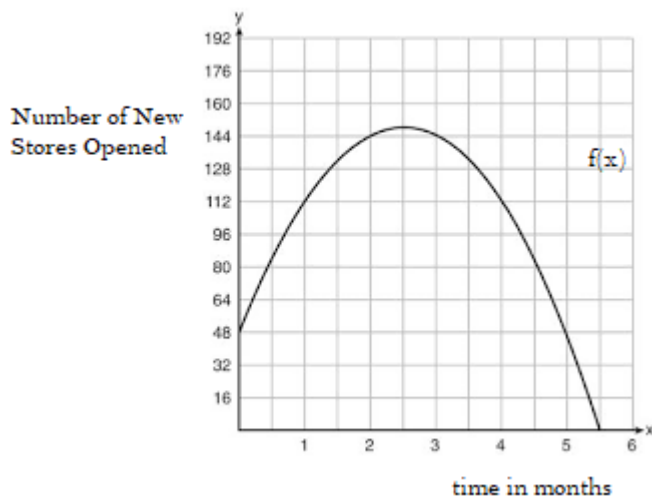   D. It results in 400 and means that 400 units were produced.

3. Let $q(x) = 5x - 15$ represent the profit function for selling x pastries. What does the 25 in $q(25)$ represent?

   A. It represents the profit made from selling pastries.

   B. It represents the cost of producing pastries.

   C. It represents the number of pastries sold.

   D. It represents the price of one pastry.

4. Let $r(x) = 20x + 200$ represent the total revenue function for x subscriptions sold. What does the 150 in $r(150)$ represent?

    A. It represents the total revenue earned.

    B. It represents the number of subscriptions sold.

    C. It represents the cost of each subscription.

    D. It represents the profit from selling subscriptions.

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5. The graph below shows the function $f(x)$. This function represents the number of new stores opened in city over a period of six months. Explain what does $f(3)$ represents.

time in months

A. There will be 0 new stores opened during month 48.
B. There will be 48 new stores opened during month 3.
C. There will be 3 new stores opened during month 144.
D. There will be 144 new stores opened during month 3.

Answer Key

1. A
2. A
3. C
4. B
5. D