

MA 110 PRACTICE  
QUIZ #2  
SECTION 1.3

NAME Solutions

SCORE: \_\_\_\_\_

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$C = 39x + 1905$  represents the cost for a company that manufactures tennis rackets, where  $x$  is the number of tennis rackets manufactured and  $C$  is the cost, in dollars, of making  $x$  tennis rackets.

A. Interpret the slope of the equation in the context of the problem.

For each additional tennis racket manufactured the cost increases by \$39.

B. How much will it cost the company to produce 100 tennis rackets per day?

$$C = 39(100) + 1905 = 3900 + 1905 = 5805 \quad \$5805$$

C. If the company has enough investments to spend \$7950 per day on production, how many tennis rackets can be made daily?

$$7950 = 39x + 1905 \rightarrow 6045 = 39x \rightarrow x = 6045/39 = 155 \quad 155 \text{ tennis rackets}$$