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A person's score on a timed keyboarding test varies directly with the number of words the person types correctly. Each keyboarding test lasts the same amount of time.

On her first test, Catherine earned a score of 75 when she typed 200 words correctly.

- a. What is the ratio of Catherine's score to the number of words she typed correctly?
- b. Use your ratio from part (a) to write an equation that can be used to find  $y$ , the score for  $x$  words typed correctly.

On her second test, Catherine typed 240 words correctly.

- c. Use the equation you wrote in part (b) to find the score Catherine earned on her second test. Show or explain how you got your answer.

Catherine wants to earn a score of at least 96 on her third test.

- d. What is the least number of words Catherine must type correctly to earn a score of 96? Show or explain how you got your answer.