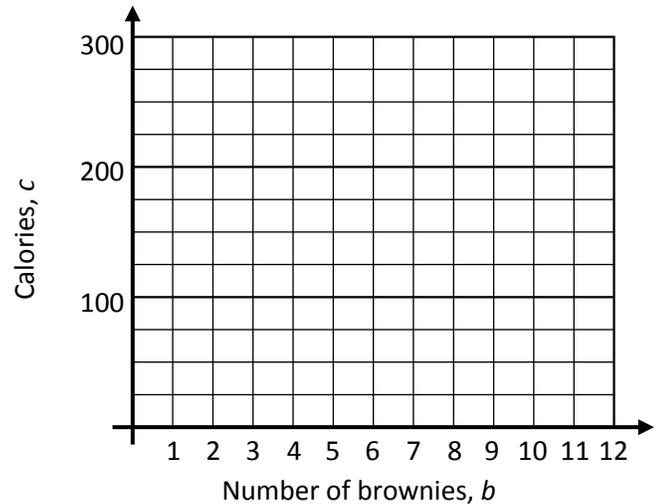1. A nutrition company is marketing a low-calorie snack brownie. A serving size of the snack is 3 brownies and has a total of 50 calories.

   (a) Determine how many calories 6 brownies would have.
   (b) Determine how many calories 21 brownies would have.
   (c) Determine how many calories 14 brownies would have. Round to the nearest calorie.
   (d) If c represents the number of calories and b represents the number of brownies, write a proportional relationship involving
       c and b and solve it for c.
   (e) Graph the proportional relationship you found in part (d) on the grid shown.
   (f) Using the graph, what is the smallest whole number of brownies a person would need to eat in order to consume 125 calories? Illustrate on your graph.
   (g) **Algebraically** determine the number of brownies a person would need to eat in order to consume 300 calories.
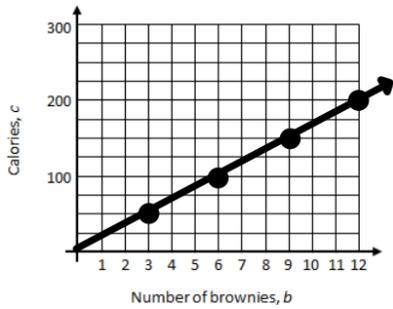

2. A local animal feed company makes its feed by the ton, which is 2000 pounds. They want to include a medication in the feed. Each cow needs 300 milligrams (mg) of this medication a day and each cow consumes 15 pounds of the feed per day. If there are 1,000 milligrams in a gram, how many grams of the medication should the feed company add for each ton of feed they produce?

R1. Which of the following values of x will make the equation $3(x-2)^2 - 4 = 23$ true? Write the table that is displayed on your calculator that justifies your choice.

   (1) $x = 1$ (2) $x = 4$ (3) $x = 5$ (4) $x = 0$

R2. Find 3 consecutive even integers whose sum is 36.

R3. Instead of finding even or odd consecutive integers we could also look for integers that differ by a number other then 2. Find three numbers that each differ by 3 such that 5 times the largest integer is equal to three times the smallest increased by 5 times the middle.

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1. (a) 100

    (b) 350

    (c) 233

    (d) $C = \dfrac{50b}{3}$

    (e) see graph

    (f) 8 brownies

    (g) 18 brownies

2. 40g

R1. (3)

R2. 10, 12, 14

R3. 5, 8, 11