

Name: _____

Cereal

Here is some information on the side of two boxes of cereal.

Tasty Oats (1 serving)
12 grams of protein in 100 grams of cereal

Cornbits (1 serving)
5 grams of protein in 45 grams of cereal

1. How many grams of Tasty Oats cereal will give you 9 grams of protein?

Show your work.

2. Which cereal, Tasty Oats or Cornbits, has the higher ratio of protein?

Explain how you figured it out.

3. The amount of carbohydrates in both Cornbits and Tasty Oats is 700% the amount of protein. How many grams of carbohydrates are in each cereal? Show your work.

4. The local grocery store wants to stock another brand of cereal that has
- 20% less grams of carbohydrates per serving than Tasty Oats
 - 75% more grams of protein per serving than Cornbits.
 - A serving size of 100 grams

How many grams per serving are not carbohydrates or protein in the new cereal? Show how you determined your answer.

Cereal	Rubric	
The core elements of performance required by this task are: <ul style="list-style-type: none"> • use ratios in context Based on these, credit for specific aspects of performance should be assigned as follows	points	section points
1. Gives correct answer: 75 grams Shows work such as: $100 \div 3/4$	2 1	3
2. Gives correct answer: Tasty Oats ; supported by some correct explanation such as: Ratio of protein in Tasty Oats = $\frac{12}{100} = 0.12$ and Ratio of protein in Cornbits = $\frac{5}{45} = 0.1111111\dots$ Or Method involving marking either the amount of protein or the amount of cereal equal. <i>Partial credit:</i> Explanation but does not show calculation.	2 2 Or 2 (1)	4
3. Gives correct answer: Cornbits: 35 grams Tasty Oats: 84 grams Partial credit is given if a student got one answer correct but not the other. Shows work such as: $7.00(5) = 35$ grams $7.00(12) = 84$ grams OR $\frac{700}{100} = \frac{x}{5}$ $\frac{700}{100} = \frac{x}{12}$ $3500 = 100x$ $8400 = 100x$ $x = 35$ $x = 84$	2 (1) 2	4
4. Gives correct answer: 24.05 grams Shows work such as: $84(.8) = 67.2$ $5(1.75) = 8.75$ $100 - 67.2 - 8.75 = 24.05$	1 1	2
Total Points		13