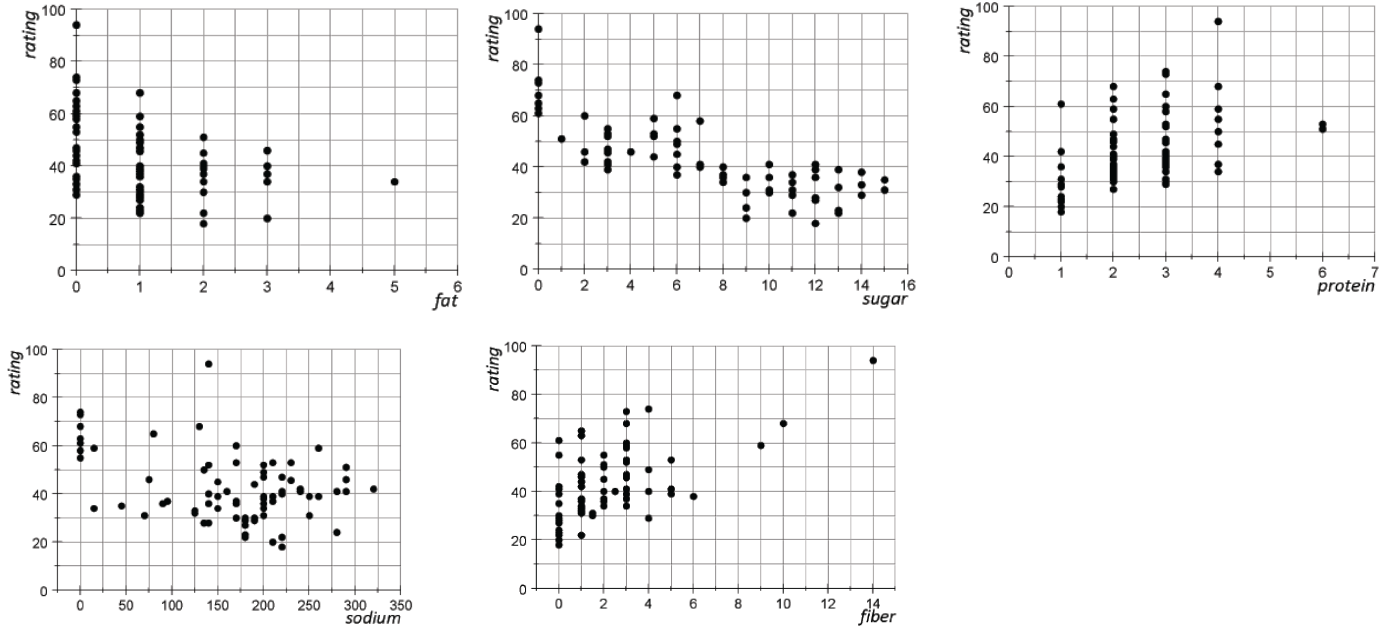


**Math 10 – Correlation and Bivariate Data Some answers**

**(gw 4)**

Consumer Reports rated 76 breakfast cereals from 0 to 100, the higher the number, the healthier the cereal. The following scatter plots show this rating paired with 5 ingredients from the nutritional label of each cereal: fat, sugar, protein, fiber grams and sodium in mgs.



1. Which ingredients are positively correlated with nutritional rating? **Protein, Fiber**
2. Which ingredients are negatively correlated with nutritional rating? **Sugar, Fat**
3. Which ingredients are not correlated with nutritional rating? **Sodium, although some might say weak negative**
4. Which ingredient has the strongest correlation with nutritional rating? **Sugar**
5. Which ingredient has the weakest correlation with nutritional rating? **Sodium**
6. Here are nutritional labels from 3 different cereals. Which cereal do you believe would get the highest nutritional rating from Consumer reports? **I would pick 3, because lowest sugar, highest fiber and protein. 2 is also possible.**

Nutrition Facts	
Serving Size 1.0 cup (1 NLEA serving)	
Amount Per Serving	
<b>Calories 117</b>	Calories from Fat 9
% Daily Value *	
<b>Total Fat 1g</b>	1%
Saturated Fat 0g	1%
Polyunsaturated Fat 0g	
Monounsaturated Fat 1g	
<b>Cholesterol 0mg</b>	0%
<b>Sodium 171mg</b>	7%
<b>Total Carbohydrate 26g</b>	9%
Dietary Fiber 1g	3%
Sugars 14g	
<b>Protein 1g</b>	

Nutrition Facts	
Serving Size 1.0 cup (1 NLEA serving)	
Amount Per Serving	
<b>Calories 101</b>	Calories from Fat 1
% Daily Value *	
<b>Total Fat 0g</b>	0%
Saturated Fat 0g	0%
Polyunsaturated Fat 0g	
Monounsaturated Fat 0g	
<b>Cholesterol 0mg</b>	0%
<b>Sodium 202mg</b>	8%
<b>Total Carbohydrate 24g</b>	8%
Dietary Fiber 1g	3%
Sugars 3g	
<b>Protein 2g</b>	

Nutrition Facts	
Serving Size 1.0 cup (1 NLEA serving)	
Amount Per Serving	
<b>Calories 111</b>	Calories from Fat 16
% Daily Value *	
<b>Total Fat 2g</b>	3%
Saturated Fat 0g	2%
Polyunsaturated Fat 1g	
Monounsaturated Fat 1g	
<b>Cholesterol 0mg</b>	0%
<b>Sodium 213mg</b>	9%
<b>Total Carbohydrate 22g</b>	7%
Dietary Fiber 4g	14%
Sugars 1g	
<b>Protein 4g</b>	