## Proportional Determination Instructions

1. Use the ratio $\frac{3 \text { cups strawberries }}{1 \text { cup blueberries }}$ and the given equivalent ratios to complete the sections below, where cups of blueberries will be the input and cups of strawberries is the output.

Equivalent Ratios

| $\frac{6 \text { cups strawberries }}{2 \text { cups blueberries }}$ | $\frac{9 \text { cups strawberries }}{3 \text { cups blueberries }}$ | $\frac{12 \text { cups strawberries }}{4 \text { cups blueberries }}$ | $\frac{18 \text { cups strawberries }}{6 \text { cups blueberries }}$ |
| :---: | :---: | :---: | :---: |



## Proportional Determination Instructions

2. Use the ratio $\frac{1 \text { cup blueberries }}{3 \text { cups strawberries }}$ and the given equivalent ratios to complete the sections below, where cups of strawberries will be the input and cups of blueberries is the output.

Equivalent Ratios

| $\frac{2 \text { cups blueberries }}{6 \text { cups strawberries }}$ | $\frac{3 \text { cups blueberries }}{9 \text { cups strawberries }}$ | $\frac{4 \text { cups blueberries }}{12 \text { cups strawberries }}$ | $\frac{6 \text { cups blueberries }}{18 \text { cups strawberries }}$ |
| :---: | :---: | :---: | :---: |



## Proportional Determination Instructions

3. Use the ratio $\frac{1 \text { stick of butter }}{2 \text { cups flour }}$ and the given equivalent ratios to complete the sections below, where cups of flour will be the input and sticks of butter is the output.

Equivalent Ratios

| $\frac{2 \text { sticks of butter }}{4 \text { cups flour }}$ | $\frac{3 \text { sticks of butter }}{6 \text { cups flour }}$ | $\frac{4 \text { sticks of butter }}{8 \text { cups flour }}$ | $\frac{5 \text { sticks of butter }}{10 \text { cups flour }}$ |
| :---: | :---: | :---: | :---: |


| Proportional Relationship Table |  |  |  |
| :---: | :---: | :---: | :---: |
| Cups of Flour f | Process | Sticks of Butter b | Constant Ratio $\frac{b}{f}$ |
|  |  |  | --- |
| 2 |  | 1 | 1:2 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| $f$ |  | b | $b: f$ |
| Equivalent Ratios $\rightarrow$ Proportion |  |  |  |
| 2 cups of flour |  | 12 cups |  |

Visual Model
Equation

Written Description

## Proportional Determination Instructions

4. Use the ratio $\frac{2 \text { cups of flour }}{1 \text { stick of butter }}$ and the given equivalent ratios to complete the sections below, where sticks of butter will be the input and cups of flour is the output.

Equivalent Ratios

| 4 cups of flour | $\frac{6 \text { cups of flour }}{2 \text { sticks of butter }}$ | $\frac{8 \text { cups of flour }}{4 \text { sticks of butter }}$ | $\frac{10 \text { cups of flour }}{5 \text { sticks of butter }}$ |
| :---: | :---: | :---: | :---: |



## Proportional Determination Instructions

5. Answer the questions below for each problem 1 through 4.
a) Can a line be drawn through all the points in each graph?
b) Does the line in each graph contain the origin $(0,0)$ ?
c) What is the constant ratio in the table of data? Explain how you determined the constant ratio.
\#1:
\#2:
\#3:
\#4:
d) How is the constant ratio represented in the graph of the data?
\#1:
\#2:
\#3:
\#4:
e) What food item does each ordered pair represent in the problem?
\#1:
\#2:
\#3:
\#4:
f) What is the equation that represents the data in the table? Explain your response.
\#1:
\#2:
\#3:
\#4:
g) How are the equations from the tables related to the ordered pairs in each graph?
h) How are all the graphs related? Explain your response.
i) How can you determine the input value if given the output value? Explain. \#1:
\#2:
\#3:
\#4:
