

# One Potato, Two Potato, Three Potato, Four?

## Thanksgiving Dinner Dimensional Analysis

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Preparing a Thanksgiving dinner is a lot of work for the Host. The preparation is labor intensive but usually is a labor of love. So please tell your Host how grateful you are for all the hard work they put into preparing your Thanksgiving dinner.



You could actually help your host using Dimensional Analysis. Every Host has to prepare for a unique number of guests. Using the conversions below and knowing the number of guests, you can help the Host build their grocery list so they are sure to obtain the correct quantities of foods needed for the number of guests they will be hosting.

You will practice by determining the amount of foods that would be needed to prepare a Thanksgiving meal for our class of 24 people.

CONVERSION TABLE			
1 Acorn Squash(AS) = 2 pounds	1 Sweet Potato(SP) = 1 cup Roasted SP	1 box Stuffing Mix= 6 cups prepared Stuffing	0.5 pound of white potato= 1 person
2 pounds of AS = 3.5 cups	1 cup mashed SP = 2 cup Roasted SP	1 person = ½ cup prepared stuffing	2 pounds carrots= 10 people
1 cup of AS= 2 people	4 oz mashed SP = 1 person	1 white potato = 6.5 ounces	24 ounces Turkey = 1 person
1 can cranberry sauce = 14 ounces	0.25 cup cranberry sauce = 1 person	1 pound = 16 ounces	1 cup = 8 ounces

How much of the following foods would need to be bought to feed our class of 24 people? You must fill in the correct conversion factors in the space provided for each problem. Remember, you want to start with the given amount (24 people) that needs to be converted. Be sure all your units cancel out, algebraically, except for the units your answer should be in. (1/2 pt)

Open the pdf using Kami and use the text box feature and drawing tool to fill in the amounts and cancel out your units.

Be sure there is a conversion factor in each space provided (1/2 pt). Be sure to include units with each number/value and cancel out units as you solve the problem (1/2 pt total). Study the example provided for you.

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Use the boxes below, for each problem, as Fractions. See the example for Apple Pie:

**Example:**

Given amount to convert

Conversion Factor #1

Units the answer needs to be expressed in

Conversion Factor #2

24 People	1 Slice Apple Pie	1 Apple Pie
	1 person	5 slices Apple Pie

Final Answer =  
4.8 pies = 5 pies



**Round** your final answers to the whole number that will provide the quantity needed, even if have some leftovers --Who doesn't like leftovers???

1. How many White potatoes will need to be purchased?


Final Answer =

2. How many sweet potatoes will need to be purchased?

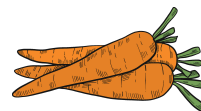

Final Answer =

3. How big of a Turkey will need to be purchased? (How many pounds?)


Final Answer =

4. How many pounds of carrots will need to be purchased?


Final Answer =



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Name: \_\_\_\_\_ Date: \_\_\_\_\_

5. How many Acorn Squash will need to be purchased?

	*	*	*

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Final Answer =



6. How many cans of Cranberry Sauce will need to be purchased?

	*	*	*

=

Final Answer =



7. How many boxes of Stuffing Mix will need to be purchased?

	*	*

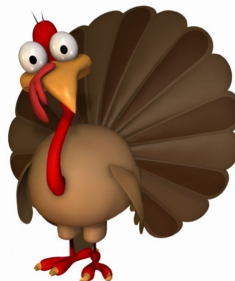
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Final Answer =



Now just imagine I asked you to calculate how much this meal would cost!?

What ?????



## **Rubric:**

- 1/2 pt for each of the 18 conversion factors (9 pts total)
- 1/2 pt for starting each problem with the given amount
- 1/2 pt for having units with each amount

**Total Extra Credit available: 10 pts**

The values in the conversion table were researched online and can actually be used for planning purposes!