5–14 Name _____ Date _____

Challenge

Spaghetti Sauce

Dorothy is hosting a spaghetti dinner. Below is her spaghetti sauce recipe.

Recipe for Spaghetti Sauce (6 servings)	
Ingredients	**Amount**
Ground beef	$1\frac{1}{2}$ lb
Tomatoes	$\frac{3}{5}$ lb
Onions	$\frac{1}{3}$ lb
Tomato paste	4 tsp
Water	$3\frac{1}{4}$ cups

1. Dorothy went to the store to pick up the ground beef, tomatoes, and onions. How much do these ingredients weigh altogether?

_____

2. How much more do the tomatoes weigh than the onions?

_____

3. Dorothy is having extra guests, and she needs to change the recipe so that she can make $2\frac{1}{2}$ times the amount of sauce in the recipe. Which operations can Dorothy use to find how much more sauce to make? Explain.

_____

_____

4. How much of each ingredient does she need to use to make $2\frac{1}{2}$ times the recipe?

_____

_____

5. What would Dorothy do if she needed to make $\frac{1}{3}$ of the recipe?

_____

5–14 Name _____ Date _____

Challenge

Spaghetti Sauce

Dorothy is hosting a spaghetti dinner. Below is her spaghetti sauce recipe.

Recipe for Spaghetti Sauce (6 servings)	
Ingredients	**Amount**
Ground beef	$1\frac{1}{2}$ lb
Tomatoes	$\frac{3}{5}$ lb
Onions	$\frac{1}{3}$ lb
Tomato paste	4 tsp
Water	$3\frac{1}{4}$ cups

1. Dorothy went to the store to pick up the ground beef, tomatoes, and onions. How much do these ingredients weigh altogether?

   $2\frac{13}{30}$ lb

2. How much more do the tomatoes weigh than the onions?

   $\frac{4}{15}$ lb

3. Dorothy is having extra guests, and she needs to change the recipe so that she can make $2\frac{1}{2}$ times the amount of sauce in the recipe. Which operations can Dorothy use to find how much more sauce to make? Explain.

   Dorothy can multiply the recipe by $2\frac{1}{2}$ or divide by $\frac{2}{5}$, since $2\frac{1}{2}$ and $\frac{2}{5}$ are reciprocals.

4. How much of each ingredient does she need to use to make $2\frac{1}{2}$ times the recipe?

   ground beef: $3\frac{3}{4}$ lb; tomatoes: $1\frac{1}{2}$ lb; onions: $\frac{5}{6}$ lb; tomato paste: 10 tsp; water $8\frac{1}{8}$ cups

5. What would Dorothy do if she needed to make $\frac{1}{3}$ of the recipe?

   She could multiply by $\frac{1}{3}$ or divide by $\frac{3}{1}$.