

Seed Packets and other ratios - Homework

I am learning to solve simple ratio problems by repeating copying.

Exercise 1: Investigation.

Ratios are used every day in all kinds of situations. You are to investigate some situations involving ratios and to report, in detail, on TWO of them.

You must state:

- the specified ratio for each
- how much of each ingredient is required for 1, 2, 5, 9, 12, and 15 quantities.

You must present your findings on an A3 poster. Present your quantities in a table. You may include illustrations, or the packet itself, but this is optional.

You may select from:

- petrol/oil mixture in engines
- Soda Stream or Raro powder mixture
- Recipes (e.g. flour/yeast/sugar in bread)
- Jelly or instant pudding
- Hair or clothing dye
- soap powder in a washing machine
- sent/received text messages or emails
- V bottles have a ratio on the side of them
- butter vs margarine (look at the ingredients on the side of the packet)
- cough mixture doses adult : child

NB: Other topics are possible - check with your teacher.

AC

EA

AA

AM

AP

Exercise 2: Cake Stall

You are involved in a cake stall for school fundraising. How much of each ingredient will you need to make 2, 5, 8, and 12 of each of the following:

Extra Large Chocolate Cake

4 Cups flour
 2 Cups sugar
 1 teaspoon baking soda
 4 Tablespoons cocoa
 8 teaspoons baking powder
 4 eggs
 225 grams butter
 600 mL milk

Ingredients	2 cakes	5 cakes	8 cakes	12 cakes
flour				
sugar				
baking soda				
cocoa				
baking powder				
eggs				
butter				
milk				

Date Loaf

1 Cup dates
 1 Cup water
 55 grams butter
 1 teaspoon baking soda
 2 Cups flour
 1 Cup sugar

Ingredients	2 cakes	5 cakes	8 cakes	12 cakes
dates				
water				
butter				
baking soda				
flour				
sugar				

Exercise 3: Pizza Party

Your friends are having a pizza party, but only have a recipe for a pizza to feed 2 people. Calculate the ingredients needed for a 1 person serving, then complete the table for 5 servings, 8 servings, and 25 servings.

Pizza dough (2 serves)

1 Cup flour
 2 teaspoons salt
 1 teaspoon sugar
 2 Tablespoons yeast
 2 Cups water
 1 Tablespoon oil
 3 Cups extra flour

Ingredients	1 serving	5 servings	8 servings	25 servings
flour				
salt				
sugar				
yeast				
water				
oil				
Extra flour				

Seed Packets and other ratios – Homework Sheet

Answers

Exercise 1: Investigation.

Students must prepare an A3 page on two products involving ratios, giving:

- the specified ratio for each
- how much of each ingredient is required for 1, 2, 5, 9, 12, and 15 quantities.

While it can be illustrated, it should be set out in a chart as seen in Ex 2 and 3.

Exercise 2: Cake Stall

Extra Large Chocolate Cake

- 4 Cups flour
- 2 Cups sugar
- 1 teaspoon baking soda
- 4 Tablespoons cocoa
- 8 teaspoons baking powder
- 4 eggs
- 225 grams butter
- 600 mL milk

Ingredients	2 cakes	5 cakes	8 cakes	12 cakes
flour	8 C	20 C	32 C	48 C
sugar	4 C	10 C	16 C	24 C
baking soda	2 †	5 †	8 †	12 †
cocoa	8 T	20 T	32 T	48T
baking powder	16 T	40 T	64 T	96 T
eggs	8	20	32	48
butter	450g	1250g	1800g	2700g
milk	1200ml	3 L	4.8 L	7.2 L

Date Loaf

- 1 Cup dates
- 1 Cup water
- 55 grams butter
- 1 teaspoon baking soda
- 2 Cups flour
- 1 Cup sugar

Ingredients	2 cakes	5 cakes	8 cakes	12 cakes
dates	2 C	5 C	8 C	12 C
water	2 C	5 C	8 C	12 C
butter	110g	275g	440 g	660g
baking soda	2 †	5†	8 †	12 †
flour	4 C	10 C	16 C	24 C
sugar	2 C	5 C	8 C	12 C

Exercise 3: Pizza Party

Pizza dough (2 serves)

- 1 Cup flour
- 2 teaspoons salt
- 1 teaspoon sugar
- 2 Tablespoons yeast
- 2 Cups water
- 1 Tablespoon oil
- 3 Cups extra flour

Ingredients	1 serving	5 servings	8 servings	25 servings
flour	$\frac{1}{2}$ C	2.5 C	4 C	12.5 C
salt	1 †	5 †	8 †	25 †
sugar	$\frac{1}{2}$ †	2.5 †	4 †	12.5 †
yeast	1 T	5 T	8 T	25 T
water	1 C	5 C	8 C	25 C
oil	$\frac{1}{2}$ T	2.5 T	4 T	12.5 T
Extra flour	$1\frac{1}{2}$ C	7.5 C	12 C	37.5 C