

Baker's Percentages

- Each ingredient is expressed as a % of the flour, by weight:

$$\frac{\text{Weight of Ingredient}}{\text{Weight of flour}} \times 100\% = \% \text{ of ingredient}$$

- Formulas can be easily adapted to ANY yield
- New yield is adjusted the same way as for any recipe

Example

Ingredient	Weight	Percentage
Cake flour	5 lb	100%
Sugar	5 lb	
Baking powder	4 oz	
Salt	2 oz	
Shortening	2 lb 8 oz	
Skim milk	3 lb	
Egg whites	3 lb	
Total	18 lb 14 oz	

Example

Ingredient	Weight	Percentage
Cake flour	5 lb	100%
Sugar	5 lb	=5/5 x 100
Baking powder	4 oz	
Salt	2 oz	
Shortening	2 lb 8 oz	
Skim milk	3 lb	
Egg whites	3 lb	
Total	18 lb 14 oz	

Example

Ingredient	Weight	Percentage
Cake flour	5 lb	100%
Sugar	5 lb	100%
Baking powder	4 oz	=4/(5 x 16) x 100
Salt	2 oz	
Shortening	2 lb 8 oz	
Skim milk	3 lb	
Egg whites	3 lb	
Total	18 lb 14 oz	

Example

Ingredient	Weight	Percentage
Cake flour	5 lb	100%
Sugar	5 lb	100%
Baking powder	4 oz	5 %
Salt	2 oz	2.5%
Shortening	2 lb 8 oz	= 2.5/5 x 100
Skim milk	3 lb	
Egg whites	3 lb	
Total	18 lb 14 oz	

Example

Ingredient	Weight	Percentage
Cake flour	5 lb	100%
Sugar	5 lb	100%
Baking powder	4 oz	5 %
Salt	2 oz	2.5%
Shortening	2 lb 8 oz	50%
Skim milk	3 lb	60%
Egg whites	3 lb	60%
Total	18 lb 14 oz	377.5%

What if I only want to make 3 lbs?

- Divide desired new yield by the yield % and round

$$\frac{\text{New Yield}}{\text{Yield \%}} \times 100 = \text{New Flour wt}$$

e.g. $\frac{48 \text{ oz}}{377.5} \times 100 = 12.7 \text{ oz} = 13 \text{ oz}$

- Using new flour weight, calculate ingredient weight based on the percentages!

$$\text{Ingredient wt} = \frac{\text{Ingredient \%}}{100} \times \text{Flour wt}$$

e.g. Sugar wt = $\frac{100\%}{100} \times 13 \text{ oz}$

Example

Ingredient	Weight	Percentage
Cake flour	13 oz	100%
Sugar	13 oz	100%
Baking powder	= (5%/100) x 13	5 %
Salt		2.5%
Shortening		50%
Skim milk		60%
Egg whites		60%
Total		377.5%

Example

Ingredient	Weight	Percentage
Cake flour	13 oz	100%
Sugar	13 oz	100%
Baking powder	0.65 oz	5 %
Salt	0.33 oz	2.5%
Shortening	= (50%/100) x 13 oz	50%
Skim milk		60%
Egg whites		60%
Total		377.5%

Example

Ingredient	Weight	Percentage
Cake flour	13 oz	100%
Sugar	13 oz	100%
Baking powder	0.65 oz	5 %
Salt	0.33 oz	2.5%
Shortening	6.5 oz	50%
Skim milk	7.8 oz	60%
Egg whites	7.8 oz	60%
Total	= (377.5%/100) x 13	377.5%

Example

Ingredient	Weight	Percentage
Cake flour	13 oz	100%
Sugar	13 oz	100%
Baking powder	0.65 oz	5 %
Salt	0.33 oz	2.5%
Shortening	6.5 oz	50%
Skim milk	7.8 oz	60%
Egg whites	7.8 oz	60%
Total	49 oz	377.5%

Assignment #4 is due Mon. April 12