



Roby invites his friends to celebrate his success. He plans to serve them pizzas. Help him to procure the ingredients.

- 1 78 grams of dough is required for cheese pizzas and 67 grams for Roby's special pizza. (Round off to the nearest tens.)

		Actual value	Estimated value
Dough used for cheese pizza (grams)	=	<input type="text"/>	<input type="text"/>
Dough used for Roby's special pizza (grams)	=	<input type="text"/>	<input type="text"/>

- 2 Roby bought eggs for \$81 and chicken for \$89. (Round off to the nearest tens.)

		Actual value	Estimated value
Money spent on eggs (\$)	=	<input type="text"/>	<input type="text"/>
Money spent on chicken (\$)	=	<input type="text"/>	<input type="text"/>

- 3 There are 123 grams and 231 grams of flour kept in two boxes. Estimate the amount of flour. (Round off to the nearest hundreds.)

		Actual value	Estimated value
Quantity in the first box (grams)	=	<input type="text"/>	<input type="text"/>
Quantity in the second box (grams)	=	<input type="text"/>	<input type="text"/>

- 4 Roby spends \$143 on vegetables, \$308 on cheese, and \$81 on sauces. Estimate the money spent. (Round off to the nearest hundreds.)

		Actual value	Estimated value
Money spent on vegetables (\$)	=	<input type="text"/>	<input type="text"/>
Money spent on cheese (\$)	=	<input type="text"/>	<input type="text"/>
Money spent on sauces (\$)	=	<input type="text"/>	<input type="text"/>
Estimated amount spent (\$)	=	<input type="text"/> + <input type="text"/> + <input type="text"/>	= <input type="text"/>

- 5 Roby estimates that 9 slices of pizza are needed per person. Estimate the number of slices required for 10 guests. (Round off to the nearest tens.)

		Actual value	Estimated value
Number of slices per person	=	<input type="text"/>	<input type="text"/>
Estimated number of slices for 10 guests	=	<input type="text"/>	<input type="text"/> × <input type="text"/> = <input type="text"/>



## Learning Outcome:

Solve multi-step word problems which involves estimation.  
4.OA.A.3

Roby's restaurant started receiving huge orders. Here are the dishes that need to be prepared. Answer the following questions and help Roby estimate the quantities.



- 1 To make pizzas, he requires 213 grams of cheese, 179 grams of dough, and 86 grams of toppings. Estimate the total amount of ingredients needed. (Round off to the nearest hundreds.)

Estimated amount of cheese (grams) =

Draw estimations on the number line.

Estimated amount of dough (grams) =

Estimated amount of toppings (grams) =

Total amount of ingredients (grams) =

- 2 A carton of spaghetti contains 108 grams. Roby knows that 8 grams of spaghetti is needed for one serving. Is he correct in estimating that one carton is enough for 11 serving? (Round off to the nearest tens.)

Draw estimations on the number line.

- 3 If 10 grams of chicken costs \$9, estimate the amount required for buying 149 grams of chicken. (Round off to the nearest tens.)

Draw estimations on the number line.

- 4 For every 100 servings of any dish, there is a loss of 9 grams of ingredients. Estimate the loss of ingredients for a week if they sold 303 servings of pizza and 413 servings of spaghetti. (Round off to the nearest tens.)

Thanks to you, Roby is running a good business.



Roby wants to expand his business. Here are the costs of expansion in different cities. Estimate the budget.

REQUIREMENTS	IMPHOR	MYPOS	PETORIA
Rent (per m <sup>2</sup> )	\$9	\$10	\$11
Furnishing (per m <sup>2</sup> )	\$9	\$29	\$21
Decor (per m <sup>2</sup> )	\$19	\$31	\$11
Equipment (per m <sup>2</sup> )	\$32	\$18	\$51

Estimate the budget by rounding off the rates to the nearest tens. A good restaurant requires an area of 100 m<sup>2</sup>-200 m<sup>2</sup>.

Area (m<sup>2</sup>) =

Selected city:

Estimated area (m<sup>2</sup>) =

Estimated rent (\$) =  ×  =

Estimated cost of furnishing (\$) =  ×  =

Estimated cost of decor (\$) =  ×  =

Estimated cost of equipments (\$) =  ×  =

Estimated budget (\$) =  +  +  +  =

Now, he's ready to build his restaurant with this budget.

