

NCERT SOLUTIONS

CLASS - 4th

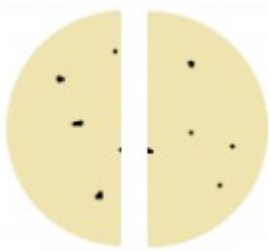


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Class : 4th
Subject : Math
Chapter : 9
Chapter Name : Halves And Quarters

Q1 If the cats ask you to divide the chapati equally how will you divide it?

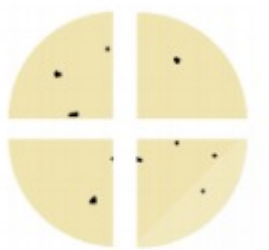
Answer. To divide the chapatti equally, I will fold it in such a way that one part coincides with the other exactly. These parts will look as shown in the figure.



Page : 95 , Block Name : Half-Half

Q1 If two more cats come for food how will you divide one chapati equally for four cats?

Answer. To divide one chapati equally into four parts. I will first divide into two halves. Then. I will fold each half in such a way that one part coincides with the other exactly. These parts will look as under:



Page : 95 , Block Name : Half Of Half

Q1 Rani got a chocolate. She divided it equally and gave half to her friend Reena.

- Circle the portion the Reena got.
- How many pieces of chocolate are there?
- How many pieces were left with Rani?

Answer. (a) Reena's portion is shown as encircled:



- (b) How many pieces of chocolate are there?
- (c) There are six pieces of chocolate.

Page : 95 , Block Name : Half Of Many Pieces

Q1 Rajini's father brought a cake. She divided the cake into 4 equal parts- for herself, her brother Raju, her father and her mother.

- (a) Colour each share with different colors.
- (b) How much does each get?
- (c) Out of four parts, Rajni will get 2 parts. Which is equal to half of the cake. So she can write as $\frac{2}{4}$ or $\frac{1}{2}$
- (d) Colour the share Raju got.

Answer. (a)



- (b) Each gets $\frac{1}{4}$ the cake.
- (c)



- (d)



Page : 98 , Block Name : Cutting The Cake

Q1 Using a Price List:

Item	Price in Rs (per kg)
Tomato	8
Potato	12
Onion	10
Carrot	16
Pumpkin	4

How much does $\frac{1}{2}$ kg tomato costs?

- (a) How much does kg of tomatoes cost?
 (b) Which costs more $\frac{1}{2}$ kg of onions or $\frac{1}{4}$ kg of carrots?
 (c) What is the price of $\frac{3}{4}$ kg of potatoes?
 (d) Keerthi is going for shopping. She has only Rs 20 with her. Can she buy all the things in her shopping list?

Answer. (a) Cost of 1 kg tomato = Rs8

(b) Cost of 1 kg of onions = Rs. 10

Cost of $\frac{1}{2}$ kg onion = Rs. $\frac{10}{2}$ = Rs.5

Cost of 1 kg of carrots = Rs = 16

Cost of $\frac{1}{4}$ kg of carrots= Rs. $16/4$ = Rs.4

Since 5 is more than 4, therefore, cost of $\frac{1}{2}$ kg of onions is more than the cost of $\frac{1}{4}$ kg

(c) Cost of 1 kg potato= Rs. 12

cost of $\frac{3}{4}$ kg of potato = Rs. $12 \times \frac{3}{4}$

$$= \text{Rs. } \frac{12 \times 3}{4}$$

= Rs.9

(d) Cost of $\frac{1}{2}$ kg potato = Rs. $8 \times \frac{1}{2}$ = Rs.4

Cost of 2kg pumpkin = Rs. 4×2 = Rs. 8

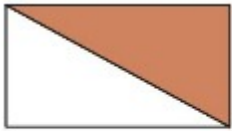
Cost of $\frac{1}{4}$ kg carrot = Rs. $16 \times \frac{1}{4} = \text{Rs.}4$

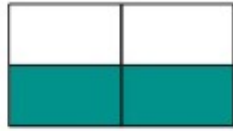
Total cost = Rs. 16

Since, Keerthi has Rs.20 which are more than Rs.16. so, she can buy all the things in her shopping list.

Page : 100 , Block Name : Using A Price List

Q1 (a) What part of the whole is colored? Write below each shape.





(b) the Color that part of the shapes which is written below.



$\frac{1}{2}$



$\frac{3}{4}$



$\frac{3}{4}$



$\frac{1}{4}$



$\frac{1}{2}$



$\frac{3}{4}$

Answer. (a) $\frac{1}{2}$ is colored and $\frac{2}{4}$ or $\frac{1}{2}$

(b)



$\frac{1}{2}$



$\frac{3}{4}$



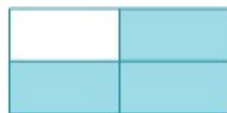
$\frac{3}{4}$



$\frac{1}{4}$



$\frac{1}{2}$

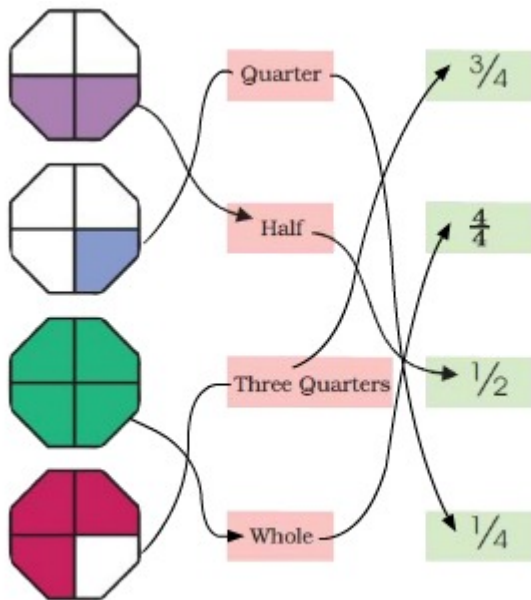


$\frac{3}{4}$

Page : 101 , Block Name : Practice Time

Q2 Match the colour part as shown.

Answer.



Page : 102 , Block Name : Practice Time

Q1 How many centimeters long is the line?

Answer. $\because 100 \times \frac{1}{2} = 50 \quad \frac{1}{2}\text{m} = 50\text{cm}$
 $\because 100 \times \frac{1}{4} = 25 \quad \frac{1}{4}\text{m} = 25\text{cm}$
 $\because 100 \times \frac{3}{4} = 75 \quad \frac{3}{4}\text{m} = 75\text{cm}$

Page : 103 , Block Name : Half And Quarter Of A Metre

- Q2 (a) How many millimeters of milk does each bottle have?
 (b) Shade the level of milk in each bottle.
 (c) How many milliliters of milk does each bottle hold?

Answer. (a) Each bottle has 250 ml of milk.
 (b) The level of milk is shaded as shown in the adjacent figure.
 (c) Milk contains in the first bottle = 750ml
 Milk contains in another bottle = 250 ml

Page : 104 , Block Name : Half And Quarter Of A Metre

Q1 Choose from the weights above to make the two pans equal. In how many ways you can do it?

Answer. Two pans can be made equal by putting the weights shown in the empty pan in many ways. Some of them are given below:
 500g, 500g, 500g, 500g
 1kg, 750g, 250g
 1kg, 500g, 250g, 250g
 800g, 500g, 700g

750g, 500g, 250g, 250g, 250g

Page : 105 , Block Name : Balance The Weight

Q2 (a) Draw the weights in empty pan. Remember $1\text{kg} = 1000\text{g}$.
(b) In how many different ways can you balance this weight of $\frac{3}{4}\text{kg}$?

Answer. (a) To balance the two pans, we will put one weight of 1 kg and two weights 500 g in the empty pan.

(b) we can weight balance $\frac{3}{4}\text{kg}$ are as under:
250g, 500g b) 200g, 200g, 100g, 200g

Page : 105 , Block Name : Balance The Weight

Q1 Kannan shaded some parts as shown. But his friend Mini says that it wrong. Explain why it is wrong.

Answer. In the case of a triangle, the four equal parts are not equal size. So, we cannot say the shaded part is $\frac{1}{2}$, because the line is not the middle of the triangle.

Page : 106 , Block Name : Why Is It Wrong

Q1 There are 60 mangoes. $\frac{1}{2}$ of them are ripe. How many mangoes are ripe?

Answer. Total number of mangoes=60
Half of the mangoes are ripe = $\frac{60}{2} = 32$

Page : 106 , Block Name : Practice Time

Q2 There are 32 children. $\frac{1}{2}$ of them are girls. How many children are boys?

Answer. Total no. of children = 32
No. of girls = $\frac{32}{2} = 16$
No. of boys = $32 - 16 = 16$

Page : 106 , Block Name : Practice Time

Q3 There are 20 stars. A quarter of them is red. How many stars are red. How many are not red?

Answer. Total no. of stars = 20
quarter of them are red = $\frac{1}{4} \times 20 = 5$
Non-red stars = $20 - 5 = 15$

Page : 106 , Block Name : Practice Time

Q4 Ravi wants a pencil. It costs Rs. 2. He gives a one-rupee coin, one half rupee coin and, one-quarter rupee coin. Is it enough?

Answer. Cost of pencil = Rs. 2

He paid for it = $1.00 + 0.50 + 0.25 = \text{Rs.}1.75$

Since, Rs.1.75 is less than Rs.2 So, it's not enough amount he paid.

Page : 106 , Block Name : Practice Time