Helping With Math

3rd
Basic

4th
Advanced

USA
GRADES

Perimeter of a Square

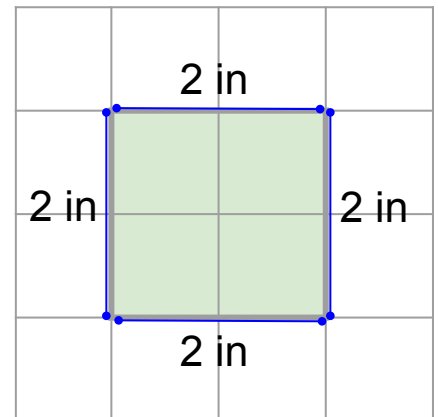*Suitable for students*
aged 7-9

This pack is suitable for learners aged 7-9 years old or 3rd to 4th graders (USA). The content covers fact files and relevant basic and advanced activities involving perimeter of a square.

Perimeter is the total length or distance of all sides of a shape.

Example:

2 in
+ 2 in
+ 2 in
+ 2 in
_____
Perimeter = 8 inches

2 in
2 in   2 in
2 in

The **perimeter of a square** is the total length of its four equal sides.

Since a square has four equal sides, we can use one side of the square to find out its perimeter by multiplying it to four.

4 x length of one side of a square
(Ex. 4 x 2 inches = 8 inches)

New Year's Day is the celebration for beginning of a new calendar year. For a part of the world, this happens on January 1 based on the Gregorian calendar.
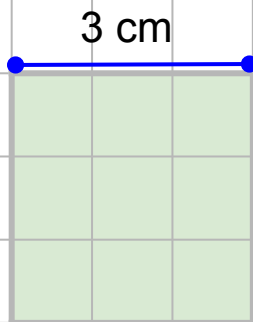
MEASURING THE PERIMETER OF A SQUARE

1. Identify the measurements of the square's side
2. Make sure that all units of measurement are the same
3. Once you have identified the measurement of one side, multiply the measurement by four to get the perimeter.

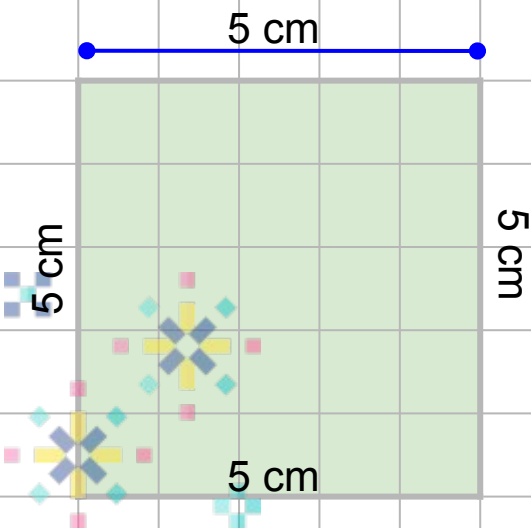**4 x length of one side of a square**

Example 1.

3 cm

Solution: 4 x 3 cm = 12 cm

3cm + 3cm + 3cm + 3cm = 12cm

Example 2.

5 cm

5 cm

5 cm

5 cm

Solution: 4 x 5 cm= 20 cm

5cm + 5cm + 5cm + 5cm = 20cm

PERIMETER OF A SQUARE EXERCISES

1.

4.5 cm
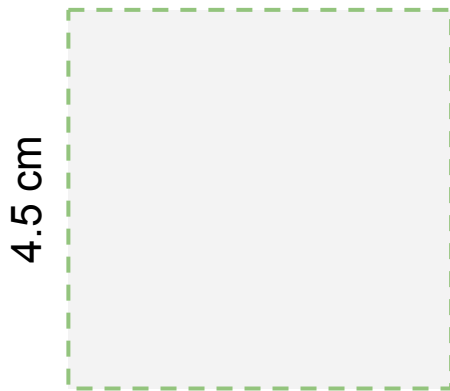
2.

10 cm

TABLE OF ACTIVITIES

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TIMES SQUARE COUNTDOWN

The New York City's annual Times Square ball drop was first done on December 31, 1907 to welcome 1908. Join the countdown and connect each square from the One Times Square building by drawing a line on the left to its perimeter on the building to the right.
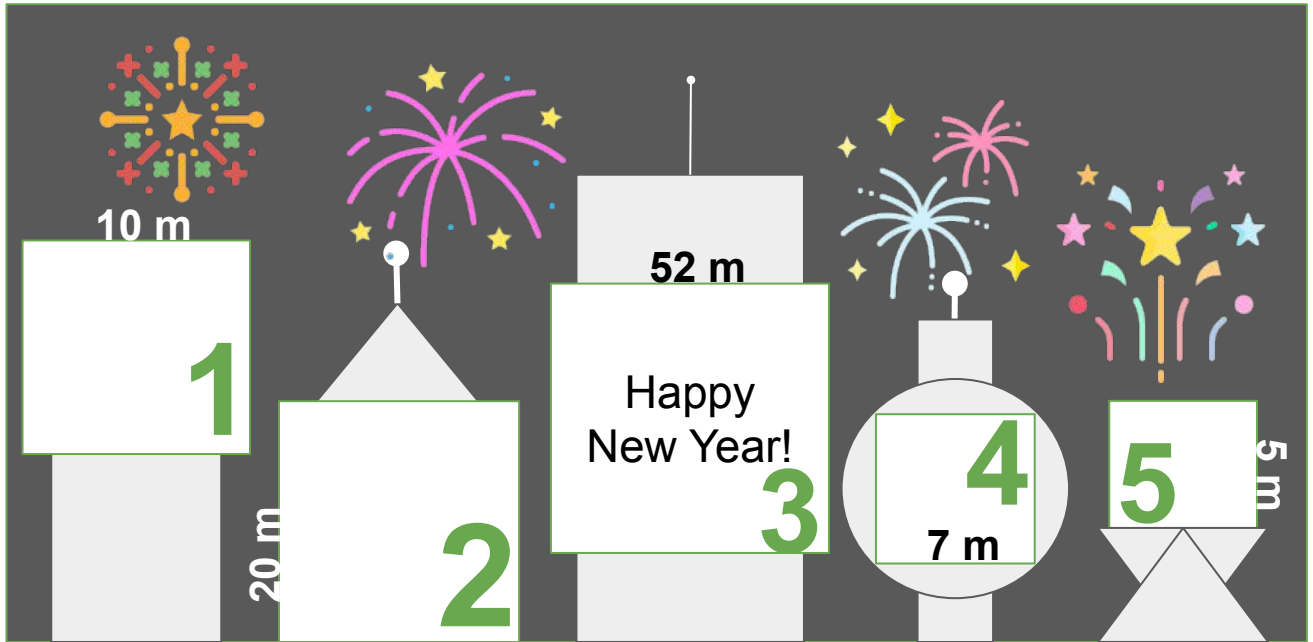
Left	Right
	60 m
5 — 8 m	4 m
4 — 13 m	32 m
3 — 15 m	100 m
2 — 1 m	52 m
1 — 25 m	
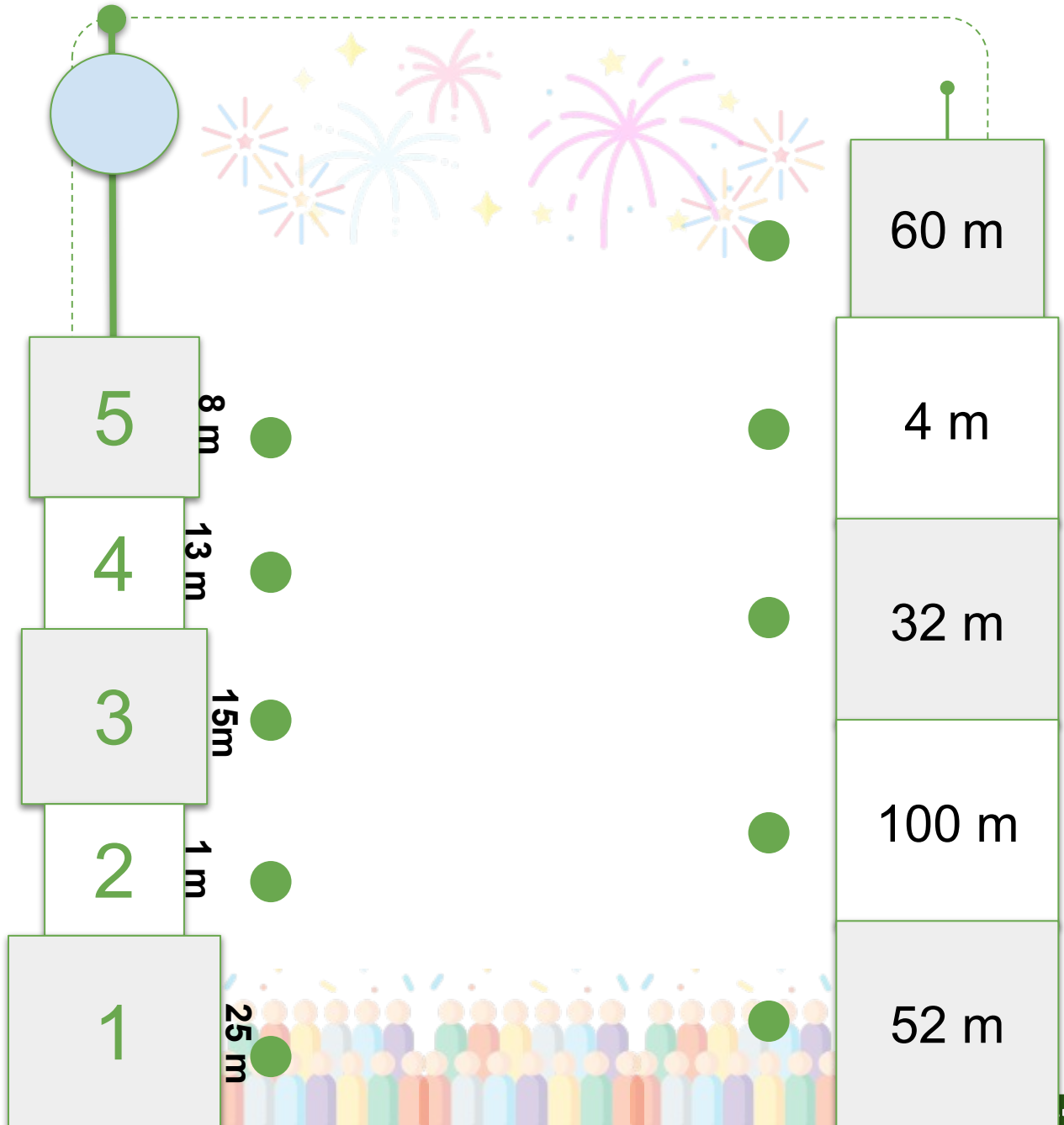
HAPPY NEW YEAR!

Happy New Year! Calculate the perimeter of the numbered squares of each building based on the side measurements. Show your solutions in the space provided below.
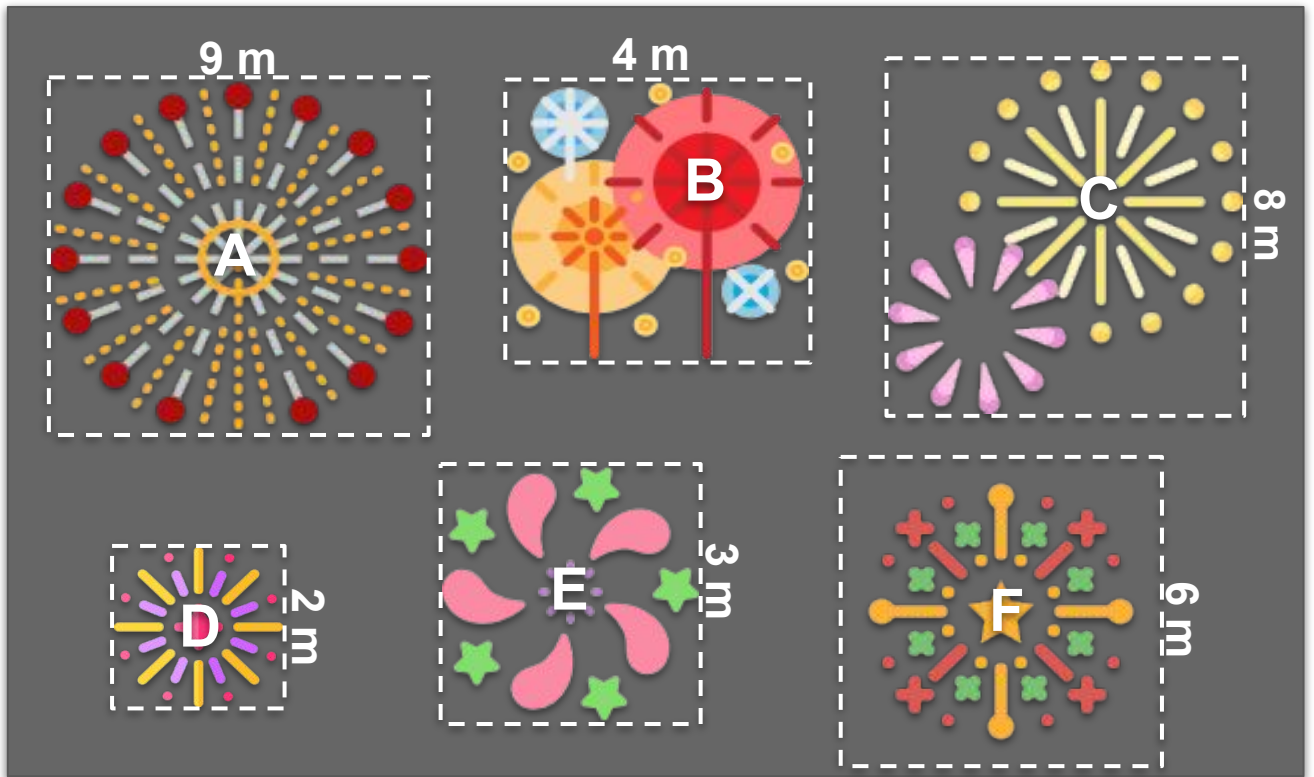

10 m
1

20 m
2

52 m
Happy
New Year!
3

4
7 m

5
5 m

1.

2.

3.

4.

5.

FIERY FIREWORKS

New Year's Eve firework displays are fun to watch with all their colorful shapes and sizes. Match the person to the square perimeter of their lit firework. Write the letter of your answer in the space provided.

9 m	4 m	
A	**B**	**C** 8 m
D 2 m	**E** 3 m	**F** 6 m

Person	Jim	Ana	Kit	Jen	Ric
Firework Perimeter	24 m	16 m	8 m	36 m	12 m
Answer					

JANUARY 1

New Year, January 1, is from the Gregorian calendar or the solar dating calendar, which is based on the time it takes for the Earth to revolve around the sun. Calculate the perimeter of the shaded area on each calendar month below. Show and explain your solutions. *Note: Each square of the grid has a side of 1 cm.*

1.

December 2021

Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Solution/Explanation:

2.

January 2022

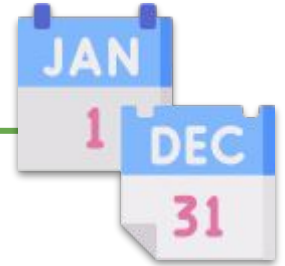| Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Solution/Explanation:

NEW YEAR'S DAY

Another year over, another year begins. It's New Year's Day! Start the new year and answer each problem below. Show your solution.

1. The perimeter of a square is 36m, what is the length of its sides?

Solution:

2. One side of a square is 5 inches, what is the perimeter of this square?

Solution:

3. The total of two sides of a square is 14 cm, what is the perimeter of this square?

Solution:

4. The perimeter of a square is 68 inches, what is the length of its side?

Solution:

NEW YEAR'S PARTY

Let us celebrate the New Year with a party. Assist with the preparations by answering each word problem. Show your solutions.

1. Decorate the square gazebo in the backyard for the new year. A string of bunting is 6 meters long and can cover two sides of the square gazebo. What is the length of one side of the gazebo? And what is perimeter of this square?

   Solution:

2. For this coming New Year's party, the family decided to make a dance video of themselves welcoming the new year. Four family members will join. Person A and Person B will stand in front beside each other 5 feet apart. Person C and D will have to follow them. They will dance in a square formation. What is the perimeter of this square?

   Solution:

NEW YEAR'S RESOLUTIONS

Some people note down goals or resolutions to achieve in the new year. Go through the list of suggested goals and encircle the letter containing the correct side length that matches the square perimeter in each number.

1. **Eat healthier**

   Perimeter: 54 cm

   a. 11 cm   **b.** 13.5 cm   **c.** 12 cm

2. **Exercise everyday**

   Perimeter: 86 cm

   a. 20.5 cm   **b.** 19.5 cm   **c.** 21.5 cm

3. **Learn a new skill**

   Perimeter: 125 cm

   a. 31.25   **b.** 25.25 cm   **c.** 30.25 cm

4. **Enjoy nature**

   Perimeter: 92 cm

   a. 23 cm   **b.** 22 cm   **c.** 24 cm

5. **Read more books**

   Perimeter: 32 cm

   a. 7 cm   **b.** 9 cm   **c.** 8 cm

All around the world, we have different ways of welcoming the new year. Learn some New Year's trivia. Encircle the letter of the correct answer in each number and show your solution.

1. It is a tradition in Spain to eat 12 grapes on New Year's eve. The 12 grapes symbolize 12 lucky months ahead. At the supermarket, the grapes are stored in square boxes with one side measuring 24 cm. What is the perimeter of this square?

    a.   86 cm   c.   76 cm

    b.   96 cm   d.   106 cm

    Solution:

2. Samoa is the first country to experience the New Year. In Samoan celebrations, to cook their feast, they use a traditional *umu* - an above-ground oven of hot stones. To create the *umu*, let us begin by creating a square wooden border that has a perimeter of 140 inches. How long should each wooden side measure?

    a.   30 inches   c.   25 inches

    b.   15 inches   d.   35 inches

    Solution:

AULD LANG SYNE

Auld Lang Syne is a popular song played in the New Year, which means "old long since" in Scots. Sing along and encircle the letter of the square with the wrong perimeter based on the side. Calculate for the correct perimeter of the square.

1.

a.
128 m
32 m

b.
165 m
41 m

c.
136 m
35 m

Correct Perimeter:

🎵 Should auld acquaintance be forgot and never brought to mind? 🎵

2.

a.
73 in
18 in

b.
64 in
16 m

c.
50 in
12.5 in

Correct Perimeter:

🎵 Should auld acquaintance be forgot… 🎵

3.

a.
268 cm
67 cm

b.
256 cm
64 cm

c.
281 cm
70 cm

Correct Perimeter:

🎵 …and days of auld lang syne? 🎵

NEW BEGINNINGS

A new year may provide the feeling of new beginnings or a blank page to draw your new plans. In the blank grids of each number, trace the square based on the perimeter given.
Note: Each square in the grid has a side of 1 cm.

1.   Perimeter = 9 cm

2.   Perimeter = 16 cm
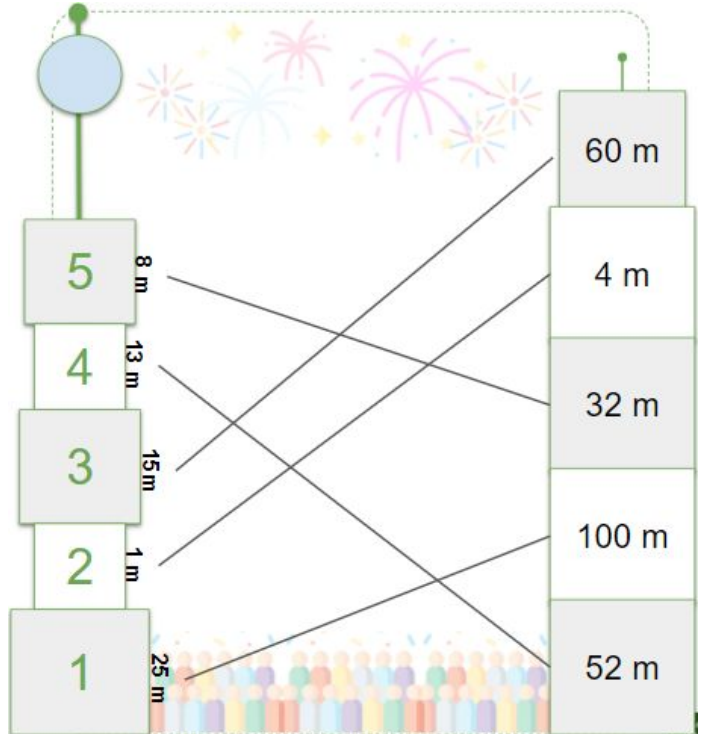
3.   Perimeter = 25 cm

4.   Perimeter = 36 cm

ANSWER GUIDE

Activity 1

1. 25 m = 100 m
2. 1 m = 4 m
3. 15 m = 60 m
4. 13 m = 52 m
5. 8 m = 32 m

Activity 2

1. 10 m x 4 sides = Perimeter 40 m
2. 20 m x 4 sides = Perimeter 80 m
3. 52 m x 4 sides = Perimeter 208 m
4. 7 m x 4 sides = Perimeter 28 m
5. 5 m x 4 sides = Perimeter 20 m

Activity 3

1. Jim / Perimeter 24 m = F / 6m
2. Ana / Perimeter 16 m = B / 4m
3. Kit / Perimeter 8 m = D / 2 m
4. Jen / Perimeter 36 m = A / 9m
5. Ric / Perimeter 12 m = E / 3 m

ANSWER GUIDE

Activity 4

December 2021

Su	Mo	4 cm		Th	Fr	Sa
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

1. On one side of the shaded square, there are four shaded squares. Each side of the calendar grid measures 1 cm.

   Therefore, 4 squares = 4 sides = total of 4 cm.

   If each side of the whole shaded square measures 4 cm

   4 cm x 4 sides = Perimeter 16 cm

January 2022

Su	Mo	Tu	6 cm	Fr	Sa
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

2. On one side of the shaded square, there are six shaded squares. Each side of the calendar grid measures 1 cm.

   Therefore, 6 squares = 6 sides = total of 6 cm

   If each side of the whole shaded square measures 6 cm

   6 cm x 4 sides = Perimeter 24 cm

ANSWER GUIDE

Activity 5

1. Perimeter = 36 m
   36 m / 4 sides = 9 m
   Each side measures 9 m

2. One side = 5 inches
   Perimeter = 5 inches x 4 sides
   Perimeter = 20 inches

3. Two sides = 14 cm
   14 cm / 2 sides = 7 cm
   Perimeter = 7 cm x 4 sides
   Perimeter = 28 cm

4. Perimeter = 54 inches
   68 in / 4 sides = 17 inches
   Each side measures 17 inches

Activity 6

1. One string of bunting = Two sides
   Two sides = 6 meters
   6 meters / 2 sides = 3 meters

   One side is 3 meters

   3 meters x 4 sides = 12 m
   The perimeter of the square gazebo is 12 m.

2. Person A to Person B = 5 feet
   Person C to Person D is the same.

   5 feet x 4 sides = 20 feet.
   The perimeter of the square dance formation is 20 feet.

ANSWER GUIDE

Activity 7

1. B. 13.5 cm
2. C. 21.15 cm
3. A. 31.25 cm
4. A. 23 cm
5. C. 8 cm

Activity 8

1. B. 96 cm

   Solution: 24 cm x 4 sides = 96 cm

2. D. 35 inches

   Solution: 140 inches / 4 sides = 35 inches

Activity 9

1. B. 165 m
   Correct Perimeter: 41 m x 4 sides = 164 m

2. A. 73 in
   Correct Perimeter: 18 in x 4 sides = 72 in

3. C. 281 cm
   Correct Perimeter: 70 cm x 4 sides = 280 cm

ANSWER GUIDE
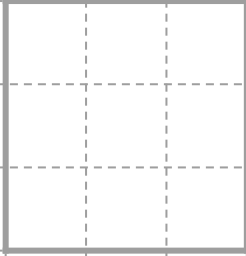
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2. **Perimeter = 16 cm**
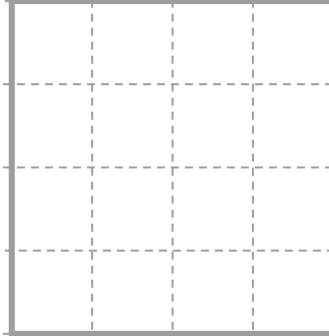
3. **Perimeter = 25 cm**
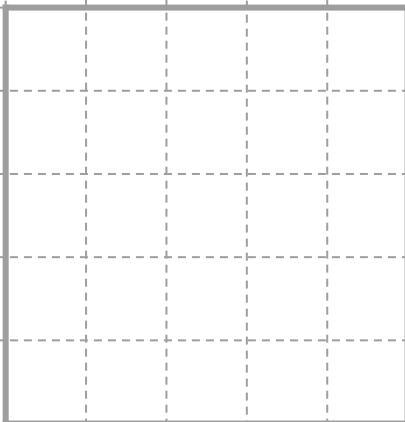
4. **Perimeter = 36 cm**

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