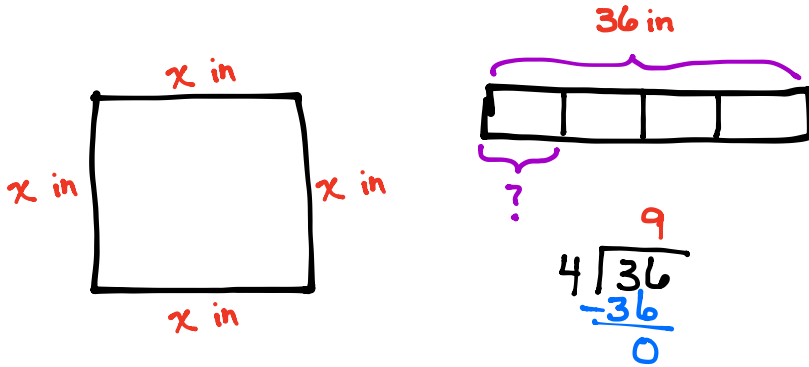Name _____   Date _____
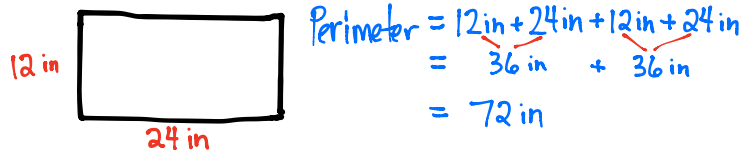
1. Rosie draws a square with a perimeter of 36 inches. What are the side lengths of the square?
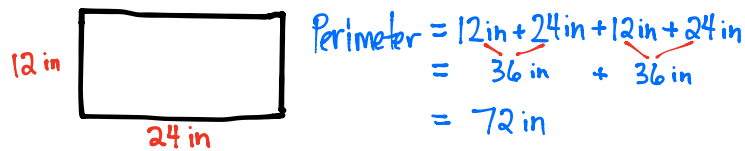
36 in

x in

x in x in

x in

?

$$4\overline{)36}$$
$$-36$$
$$0$$

9

Each side length is 9 inches.

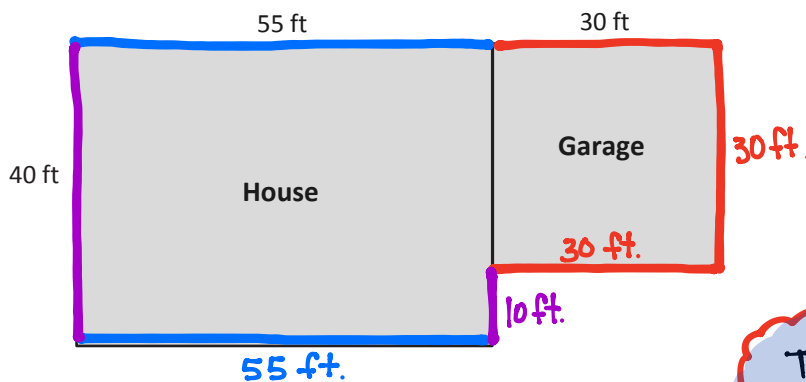2. Judith uses craft sticks to make two 24-inch by 12-inch rectangles. What is the total perimeter of the 2 rectangles?

12 in

24 in

Perimeter = 12 in + 24 in + 12 in + 24 in
= 36 in + 36 in
= 72 in

12 in

24 in

Perimeter = 12 in + 24 in + 12 in + 24 in
= 36 in + 36 in
= 72 in

Total = 72 in + 72 in
= 144 in

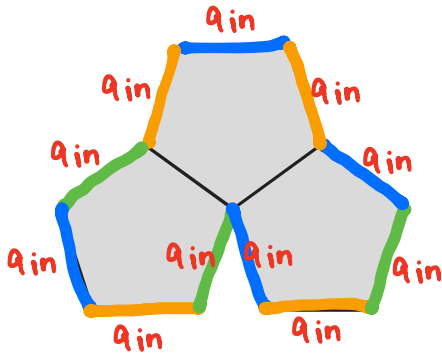*The total perimeter of the two rectangles is 144 inches.*

3. An architect draws a square and a rectangle as shown below to represent a house that has a garage. What is the total perimeter of the house with its attached garage?

55 ft   30 ft

40 ft

House

Garage

30 ft.

30 ft.

10 ft.

55 ft.

$P = 55 + 30 + 30 + 30 + 10 + 55 + 40$
$= 110 + 100 + 40$
$= 250$ feet

The total perimeter of the house and garage is 250 feet.

4. Manny draws 3 regular pentagons to create the shape shown below. The perimeter of 1 of the pentagons is 45 inches. What is the perimeter of Manny's new shape?
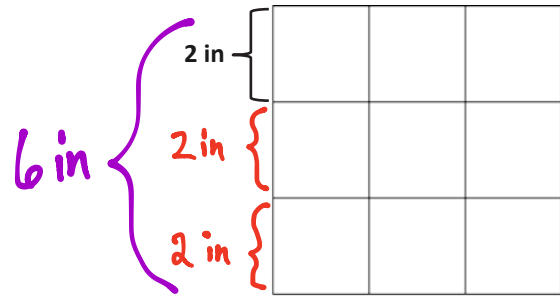
9 in
9 in   9 in
9 in   9 in
9 in   9 in 9 in   9 in
9 in   9 in

If the perimeter of a pentagon is 45 inches, then each side is 9 inches long.

$11 \times 9 \text{ in} = 99 \text{ in}$
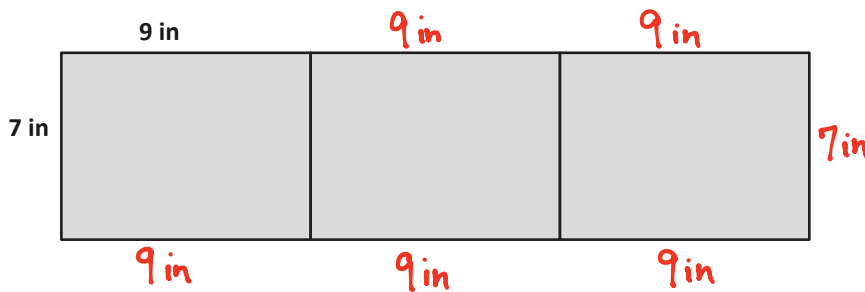
The perimeter of the shape is 99 inches.

5. Johnny uses 2-inch square tiles to make a square, as shown below. What is the perimeter of Johnny's square?

$4 \times 6 \text{ in} = 24 \text{ inches}$

6 in { 2 in
          2 in {
          2 in {

The perimeter of the square is 24 inches.

6. Lisa tapes three 7-inch by 9-inch pieces of construction paper together to make a happy birthday sign for her mom. She uses a piece of ribbon that is 144 inches long to make a border around the outside edges of the sign. How much ribbon is left over?

9 in   9 in   9 in
7 in   7 in
9 in   9 in   9 in

Perimeter $= (6 \times 9 \text{ in}) + (2 \times 7 \text{ in})$

$= 54 \text{ in} + 14 \text{ in}$

$= 68 \text{ inches}$

$$\begin{array}{r} \overset{3}{1}\overset{1}{4}4 \\ -\ \ 68 \\ \hline 76 \end{array}$$

There is 76 inches of ribbon left over.