Calculating Perimeter
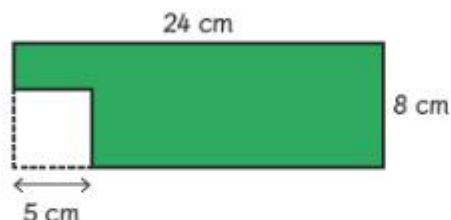
In Focus

A rectangular piece of paper had a length of 24 cm and a width of 8 cm. A square with 5 cm sides was cut out from the piece of paper.

24 cm

8 cm

5 cm

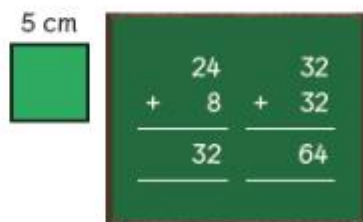What was the perimeter of the remaining piece of paper?

Let's Learn

1 Amira did it this way.

Perimeter of the rectangle
= 24 cm + 8 cm + 24 cm + 8 cm
= 64 cm

Perimeter of square
= 5 cm + 5 cm + 5 cm + 5 cm
= 20 cm

Perimeter of remaining piece
= 64 cm − 20 cm
= 44 cm

Amira is wrong.
Show the correct way to do it.

24 cm

8 cm

5 cm

```
      24        32
  +    8   +   32
  _____    _____
      32        64
```

4 × 5 = 20

2 Charles did it this way.

8 cm − 5 cm

24 cm

8 cm

5 cm

5 cm

24 cm − 5 cm

```
      24
  −    5
  _____
      19
```
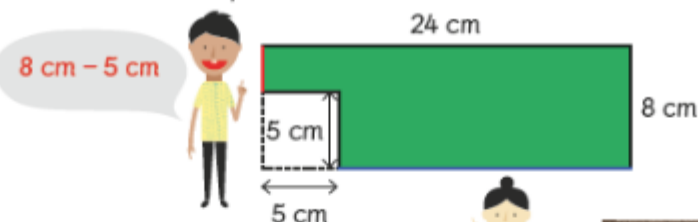
Perimeter of remaining piece
= 24 cm + 8 cm + 3 cm + 5 cm + 5 cm + 19 cm
= 64 cm

The perimeter of the remaining piece is 64 cm.
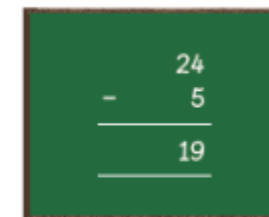
Guided Practice

Find the perimeter of the remaining piece when [ ] 2 cm squares

10 cm

are cut from

6 cm.

(a)

[ ] cm

(b)

[ ] cm

(c)

[ ] cm