Area Strat #2 - Formula

**Connect**

Parking Spot for Dr D's car

9 ft

5ft

5ft

9f

$P = l + w + l + w$

$P = l \times 2 + w \times 2$

I do

Parking Spot for Dr D's car

$A = \ell \times w$

9ft

5ft

$A = \ell \times w$

$9 \times 5 = 45$
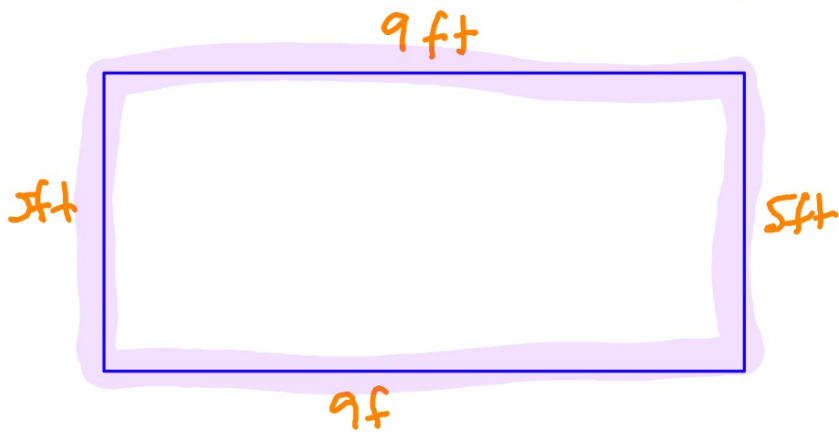
1 square foot

45 square feet

Array 9×5

I do

Parking Lot for ~~100~~ 10 cars

75ft   75 columns

25 rows

25 ft

Area =
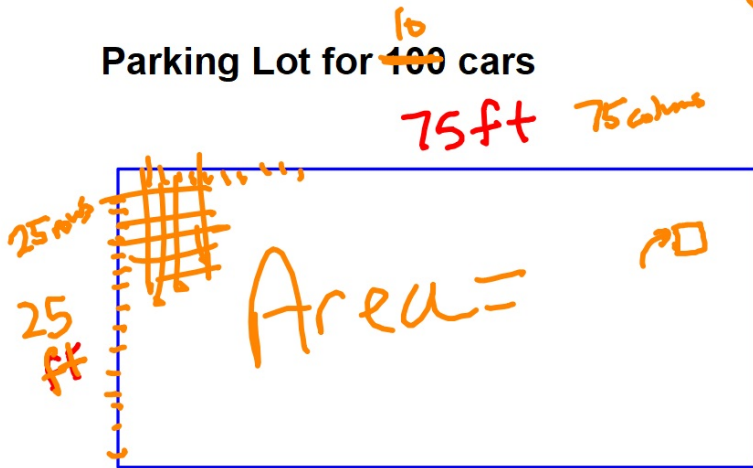
array = 25×75

$$A = \ell \times w$$
$$A = 75 \times 25$$
$$A = 1,875 \text{ square feet}$$

20 + 5

	20	5
70	1400	350
5	100	25

1400
350
100
25
‾‾‾‾
1,875

We do

rectangular garden

10m

1 2 3 4 5 6 7 8 9 10

3m

1
2
3

30

Array
10 × 3
$l \times w$

Tiling

30 square feet

Formula

$A = l \times w$
$A = 10 \times 3$
$A = 30$ sq. feet
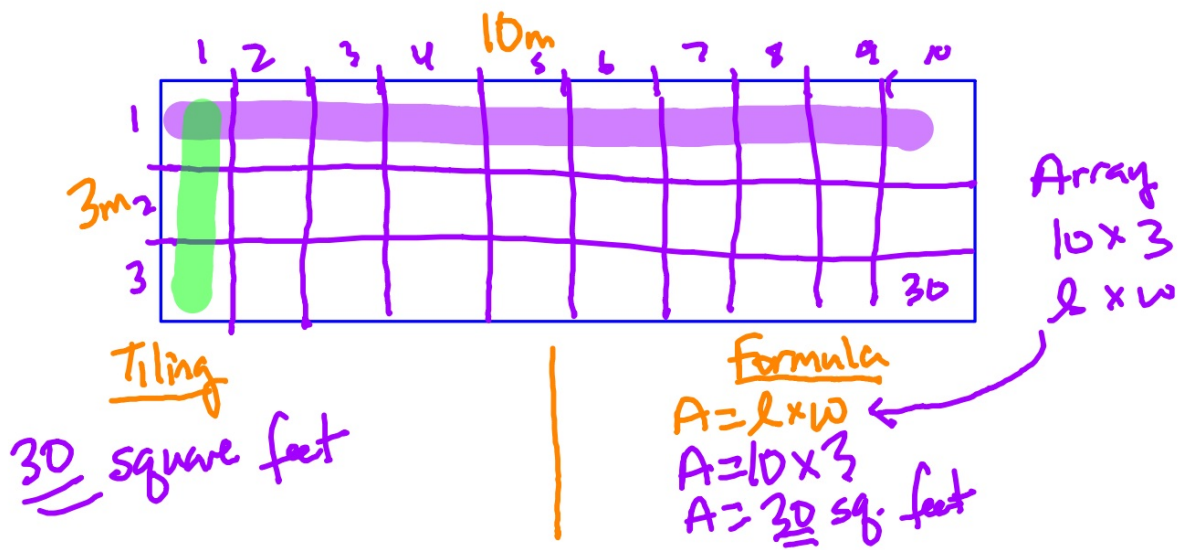
We do

farm

rectangular ~~garden~~

62 Dm

19 Dm

62

$$60 + 2$$

	60	2
10 + 9	600	20
	540	18

600
+540
+ 20
+ 18
―――――
1178
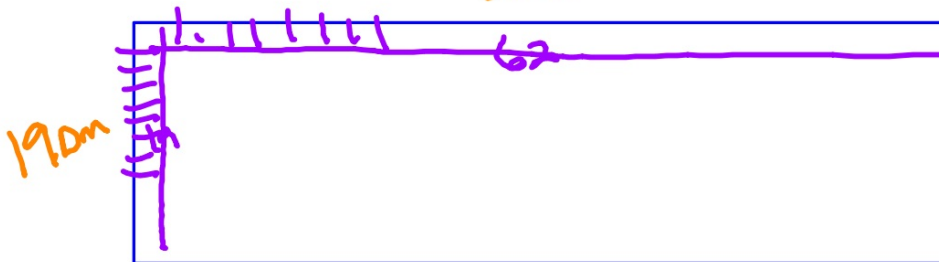
If you tiled....

array 62 × 19

ℓ × w

$A = \ell \times w$

$A = 62 \times 19$

$A = 1178$ square Decameters

Area
Formula

$A = l \times w$

$\longleftrightarrow$

Perimeter
Formulas

$P = l + w + l + w$

$P = l \times 2 + w \times 2$

**You do together
on whiteboard**

A new dog park is being built. The area they are fencing off for the park is 27 decameters long and 34 decameters wide.

Draw the rectangle, and show how to calculate the area using the formula for area

**You do alone on
index card**

The index card you are doing this problem on is often called a "3x5 card" because it is 3 inches tall and 5 inches wide.

In millimeters, it is about 75 mm tall and 125mm wide.

Show how to find the area of your index card in square mm using the formula for area

125 × 75

Area Model

	100	20	5
70	7000	1400	350
5	500	100	25

7000
1400
350
500
100
25

(9,375)

Partial Products

125
× 75
___

$A = \ell \times w$

5×5
5×20
5×100
70×5
70×20
70×100