

Warmup

1. Polygon Identification

2.

$1^2 = \underline{\hspace{2cm}}$

$2^2 = \underline{\hspace{2cm}}$

$3^2 = \underline{\hspace{2cm}}$

$4^2 = \underline{\hspace{2cm}}$

$5^2 = \underline{\hspace{2cm}}$

$6^2 = \underline{\hspace{2cm}}$

$7^2 = \underline{\hspace{2cm}}$

$8^2 = \underline{\hspace{2cm}}$

$9^2 = \underline{\hspace{2cm}}$

$10^2 = \underline{\hspace{2cm}}$

$11^2 = \underline{\hspace{2cm}}$

$12^2 = \underline{\hspace{2cm}}$

$13^2 = \underline{\hspace{2cm}}$

$14^2 = \underline{\hspace{2cm}}$

$15^2 = \underline{\hspace{2cm}}$

3.

$6 - 5 = \underline{\hspace{2cm}}$

$-7 - -2 = \underline{\hspace{2cm}}$

$-1 - 8 = \underline{\hspace{2cm}}$

$-9 - 3 = \underline{\hspace{2cm}}$

4.

$4 + 7 = \underline{\hspace{2cm}}$

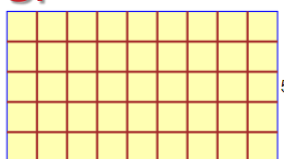
$6 + -5 = \underline{\hspace{2cm}}$

$-8 + -10 = \underline{\hspace{2cm}}$

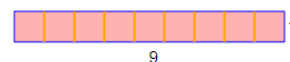
$-10 + 6 = \underline{\hspace{2cm}}$

5.

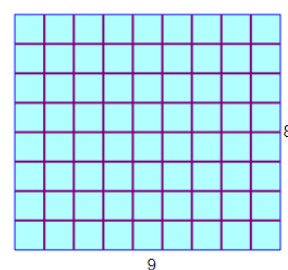
$9 \times 5 = \underline{\hspace{2cm}}$



$9 \times 1 = \underline{\hspace{2cm}}$



$9 \times 9 = \underline{\hspace{2cm}}$



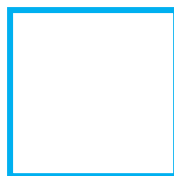
I. Rectangles and Squares

Congruent: Equal in measure (The symbol on the computer is $\equiv$ hand written is $\cong$)

What is a rectangle?

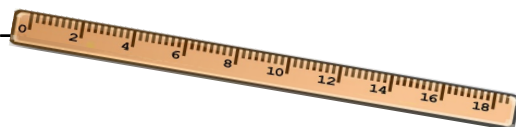


What is a square?



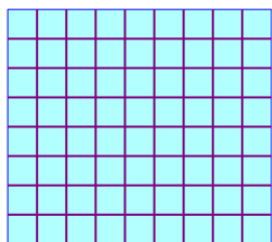
What is used to measure distance? _____

Units for measuring distance:

**Area:**

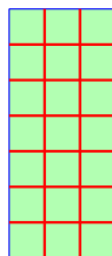
Area is the amount of square units of surface in a geometric figure.

II. Area of Rectangles



8 inches

9 inches



7 inches

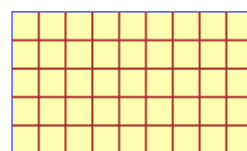
3 inches

Formula for Area of a Rectangle:

1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Use Square units.

Area = length x width

$$A = lw$$

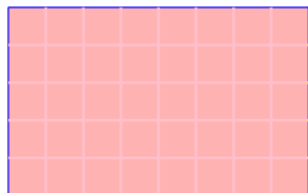


width

length

Calculate the Area of a rectangle with
length= 7cm and width = 3 cm

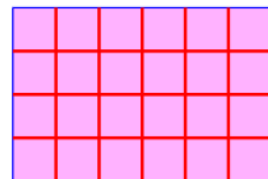
3 cm



7 cm

Calculate the Area of a rectangle with
length= 6 miles and width = 4 miles

4 miles

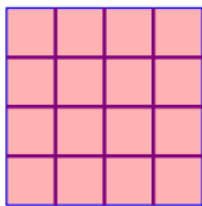


6 miles

8. Calculate the Area of each Rectangle

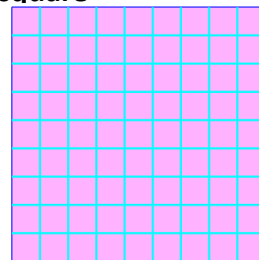
III. Area of Squares

Calculate the Area of a square with side = 4 inches.



4 inches

Calculate the Area of a square with side = 9 inches.

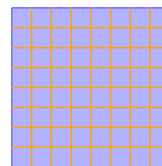


9 inches

Formula for Area of a Square:

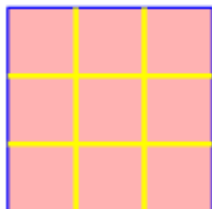
1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Use Square units.

$$\text{Area} = \text{side}^2$$
$$A = s^2$$



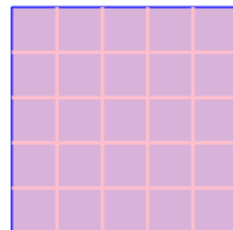
side

Calculate the Area of a square when the side equals 6 miles.



6 miles

Calculate the Area of a square with each side equal to 5 miles



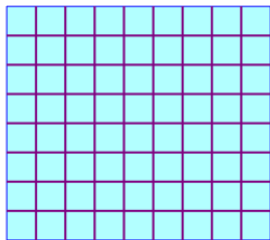
5 miles

9. Calculate the Area of each Square

IV. Perimeter of Rectangles

Perimeter: Perimeter is the distance around a geometric figure.

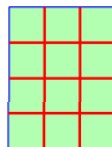
Calculate the Perimeter



8 inches

9 inches

Calculate the Perimeter



4 miles

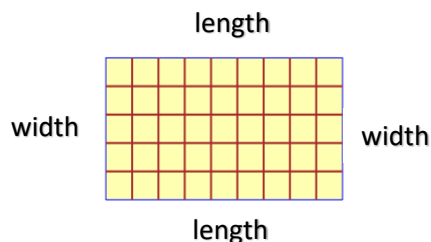
3 miles

Formula for Perimeter of a Rectangle:

Perimeter = length + length + width + width

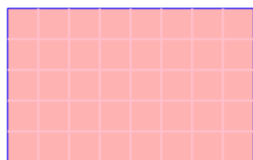
$$P = 2l + 2w =$$

1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Write the units.



Calculate the Perimeter of a rectangle
with length= 8cm and width = 5 cm

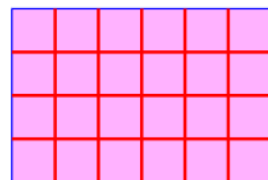
5 cm



8 cm

Calculate the Perimeter of a rectangle
with length= 6 miles and width = 4
miles

4 miles

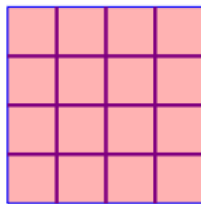


6 miles

10. Calculate the Perimeter of each Rectangle

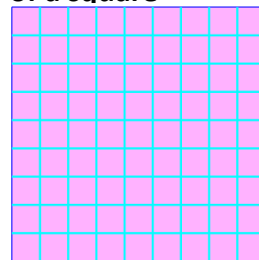
V. Perimeter of Squares

Calculate the Perimeter of a square with side = 4 inches.



4 inches

Calculate the Perimeter of a square with side = 9 inches.

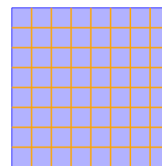


9 inches

Formula for Perimeter of a Square:

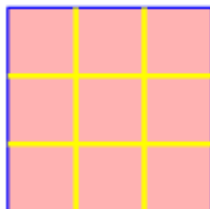
1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Write the units.

$$\text{Perimeter} = 4 \times \text{side}$$
$$P = 4s$$



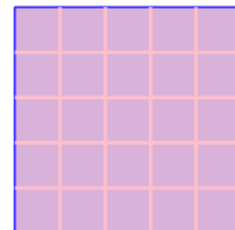
side

Calculate the Perimeter of a square when the side equals 6 miles.



6 miles

Calculate the Perimeter of a square with side = 5 miles.



5 miles

11. Calculate the Area of each Square

VI. Word Problems with Perimeter and Area

The perimeter of a square is 40 meters. What is the length of each side?

Find the width of a rectangle when the area = 105 square km and the length is 15 km.

To solve perimeter and area problems:

1. Write the formula.
2. Substitute in the known values.
3. Solve for the unknown amount
4. Use the correct units.

12. The perimeter of a square is 28 km. What is the length of each side?

13. Find the width of a rectangle when the area = 108 square yards and the length is 12 yards.

Learning is a continuous process.

IV. Practice

16

17

18

19

20

21

22

23

24

25