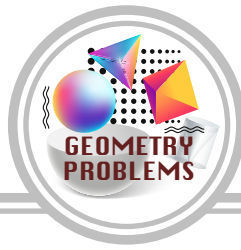


Geometry Problems

Area and Perimeter of Simple 2D Shapes

Squares and Rectangles

Math Worksheet 4



Name: _____

Answer the following. Show your solutions.



$$A = S \times S$$
$$P = 4 \times S$$

A = Area
P = Perimeter
S = side



$$A = l \times w$$
$$P = 2(a + b)$$

A = Area
l = length
w = width
P = Perimeter
a, b = sides

Find the missing side length and area of a rectangle whose perimeter is 267 m and width of 43 m.

$$P = 2(a + b)$$
$$267 = 2(43 + b)$$
$$267 = 86 + 2b$$
$$267 - 86 = 2b$$
$$181 = 2b$$
$$181 \div 2 = b$$
$$90.5 = b$$

$$A = l \times w$$
$$= 90.5 \times 43$$
$$= 3891.5$$

90.5 m

side length

3891.5 m

Perimeter

Find the side length and perimeter of a square if the given area is 324 in².

length

Perimeter

If the length of a side of a square is 59.5 mm, determine the area and perimeter.

Area

Perimeter

If the perimeter of a rectangle is 92 yd and the length is 14 yd, find the width and area.

width

Area

Find the side length and area of a square if the perimeter is 36 ft.

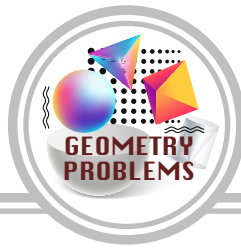
side length

Area

The length of a rectangle is 101 cm and the width is 86 cm. Find the area and perimeter.

Area

Perimeter



Answer the following. Show your solutions.



$A = S \times S$
 $P = 4 \times S$

A = Area
P = Perimeter
S = side



$A = l \times w$
 $P = 2(a + b)$

A = Area
l = length
w = width
P = Perimeter
a, b = sides

Find the missing side length and area of a rectangle whose perimeter is 267 m and width of 43 m.

$$\begin{aligned} P &= 2(a + b) \\ 267 &= 2(43 + b) \\ 267 &= 86 + 2b \\ 267 - 86 &= 2b \\ 181 &= 2b \\ 181 \div 2 &= b \\ 90.5 &= b \end{aligned}$$

$$\begin{aligned} A &= l \times w \\ &= 90.5 \times 43 \\ &= 3891.5 \end{aligned}$$

90.5 m

side length

3891.5 m

Perimeter

Find the side length and perimeter of a square if the given area is 324 in².

$$\begin{aligned} A &= S \times S \\ 324 &= S^2 \\ \sqrt{324} &= S \\ 18 &= S \end{aligned}$$

$$\begin{aligned} P &= 4 \times S \\ &= 4 \times 18 \\ &= 72 \end{aligned}$$

18 in

length

72 in

Perimeter

If the length of a side of a square is 59.5 mm, determine the area and perimeter.

$$\begin{aligned} A &= S \times S \\ &= 59.5 \times 59.5 \\ &= 3540.25 \end{aligned}$$

$$\begin{aligned} P &= 4 \times S \\ &= 4 \times 59.5 \\ &= 238 \end{aligned}$$

3540.25 mm²

Area

238 mm

Perimeter

If the perimeter of a rectangle is 92 yd and the length is 14 yd, find the width and area.

$$\begin{aligned} P &= 2(a + b) \\ 92 &= 2(14 + b) \\ 92 &= 28 + 2b \\ 92 - 28 &= 2b \\ 64 &= 2b \\ 64 \div 2 &= b \\ 32 &= b \end{aligned}$$

$$\begin{aligned} A &= l \times w \\ &= 14 \times 32 \\ &= 448 \end{aligned}$$

32 yd

width

448 yd²

Area

Find the side length and area of a square if the perimeter is 36 ft.

$$\begin{aligned} P &= 4 \times S \\ 36 &= 4 \times S \\ 36 \div 4 &= S \\ 9 &= S \end{aligned}$$

$$\begin{aligned} A &= S \times S \\ &= 9 \times 9 \\ &= 81 \end{aligned}$$

9 ft

side length

81 ft²

Area

The length of a rectangle is 101 cm and the width is 86 cm. Find the area and perimeter.

$$\begin{aligned} A &= l \times w \\ &= 101 \times 86 \\ &= 8686 \end{aligned}$$

$$\begin{aligned} P &= 2(a + b) \\ &= 2(101 + 86) \\ &= 2(187) \\ &= 374 \end{aligned}$$

8686 cm²

Area

374 cm

Perimeter