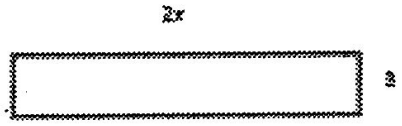
Name _____ Per _____

Solving for Area with Variables

1. Find the missing side length and value of x. The area is 90 in^2.



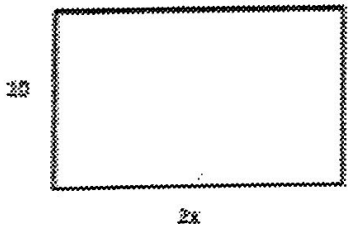
Write a formula:

Sub in values:

Solve for x:

Solve for the missing side length & label:

2. Find the missing side length and value of x if the area is 120 cm^2.



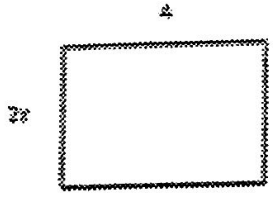
Write a formula:

Sub in values:

Solve for x:

Solve for the missing side length & label:

3. Find the missing side length if the area is 84 yd^2.



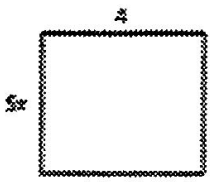
Write a formula:

Sub in values:

Solve for x:

Solve for the missing side length & label:

4. Find the missing side length if the area is 130 m^2 .



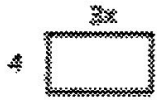
Write a formula:

Sub in values:

Solve for x:

Solve for the missing side length & label:

5. Find the missing side length if the area is 32.4 mi^2 .



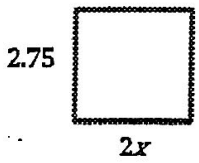
Write a formula:

Sub in values:

Solve for x:

Solve for the missing side length & label:

6. Find the missing side length if the area is 49.5 ft^2 .



Write a formula:

Sub in values:

Solve for x:

Solve for the missing side length& label:

Name _____ Per _____

Mrs. Doolan/Math6

6.G.3 Plotting Polygons on a Coordinate Grid and Solving for Area

For each of the following sets of points do the following. All problems are in units:

- Plot the points on the coordinate plane.
- Connect the points to form a polygon.
- Label each vertex with the given letter.
- Name the length of the base.
- Calculate the perimeter of the polygon.
- Solve for Area of the polygon.

#1: **X: (-3, +2)**
Y: (+3, +2)
Z: (1, -2)
W: (-5, -2)

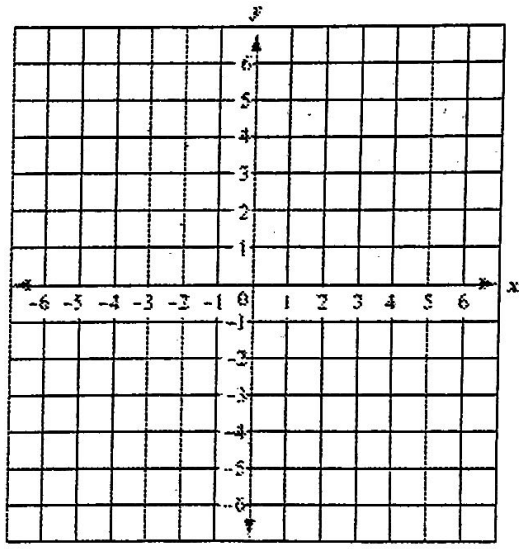
Name the shape:

Name the length of the base:
Name the height:

Solve for Area of the figure:
Formula:

Sub in values:

Solve & label:



#2: **C: (-3, 5)**
R: (5, 5)
D: (2, 2)
W: (-6, 2)

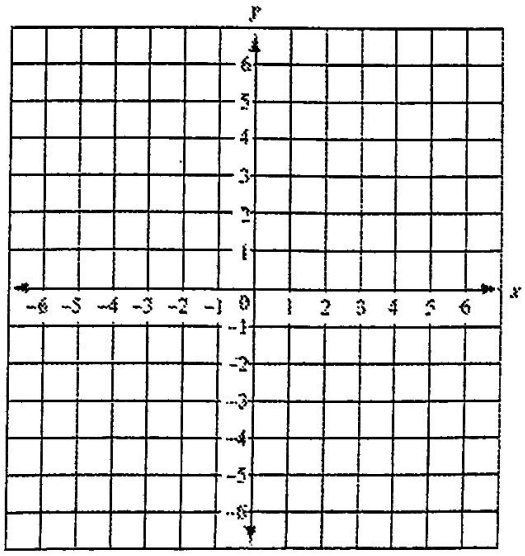
Name the shape:

Name the length of the base:
Name the height:

Solve for Area of the figure:
Formula:

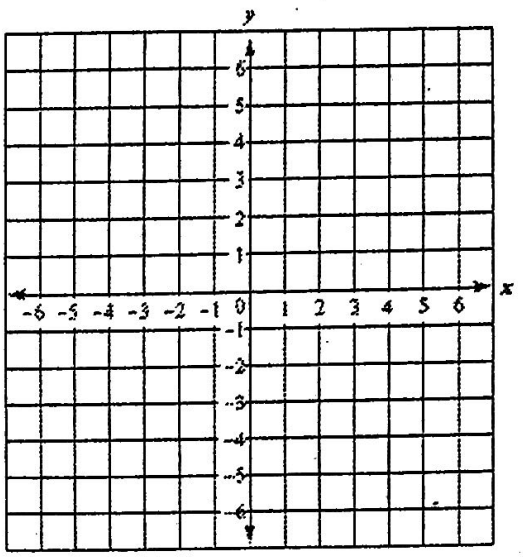
Sub in values

Solve & label:



Solve for Area of the figure:\

#3: **G: (-4, -2)**
O: (-4, 5)
R: (-1, 2)
T: (-1, -5)



Name the shape:

Name the length of the base:
Name the height:

Solve for Area of the figure:
Formula:

Sub in values

Solve & label:

Name _____ Per _____

Mrs. Doolan/Math6

6.G.3 Plotting Polygons on a Coordinate Grid and Solving for Perimeter and Area

For each of the following sets of points do the following. All problems are in units:

- Plot the points on the coordinate plane.
- Connect the points to form a polygon.
- Label each vertex with the given letter.
- Name the length of the base.
- Calculate the perimeter of the polygon.
- Solve for Area of the polygon.

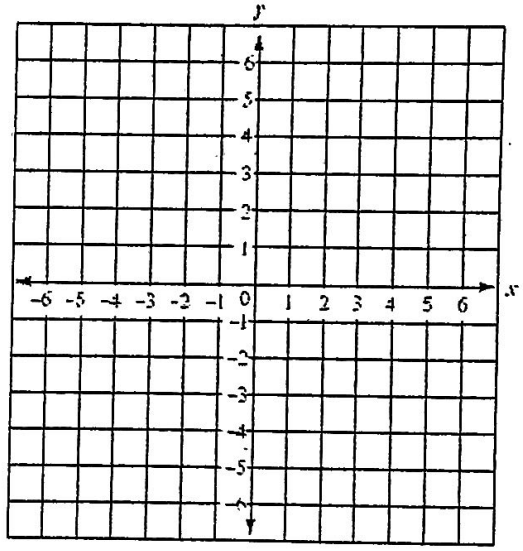
#1: **A: (-3, +2)**
B: (+3, +2)
C: (+3, -2)
D: (-3, -2)

Name the shape:

Name the length of the base:

Solve for perimeter of the figure:

Solve for Area of the figure:

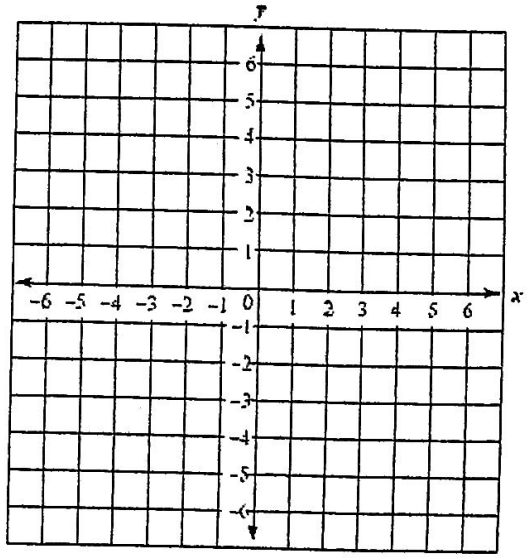


#2: **Z: (-5, -4)**
Y: (-5, +3)
X: (+3, -4)

Name the shape:

Name the length of the base:

Solve for Area of the figure:\



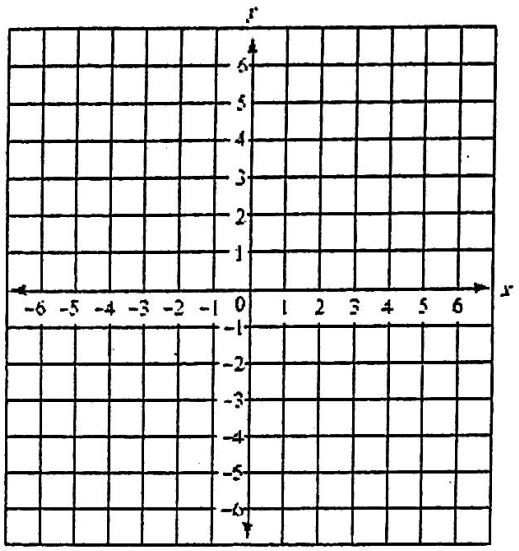
#3:

C: (+2, +5)
M: (+3, +7)
R: (+6, +7)
D: (+5, +5)

Name the shape:

Name the length of the base:

Solve for Area of the figure:



#4:

B: (+1, -2)
N: (+4, +2)
S: (+6, +2)
J: (+3, -2)

Name the shape:

Name the length of the base:

Solve for Area of the figure: