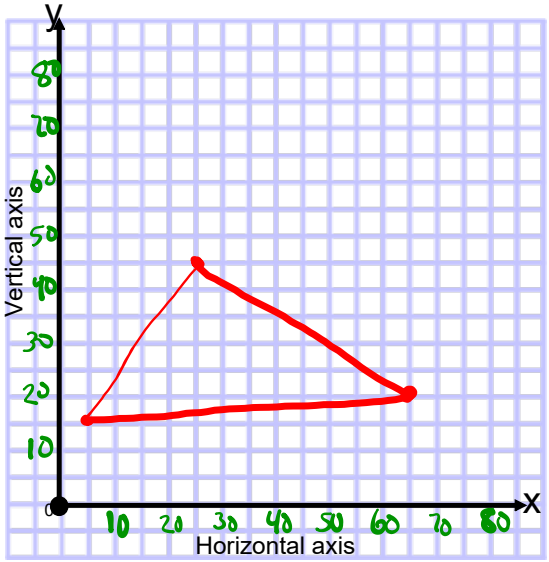
Lesson 1 Day 2

Warm Up Grade 6
Ch. 8 Transformations

Date: May 14




plot in order and connect as you go

(5,15), (25, 45) , (65, 20),

close the shape

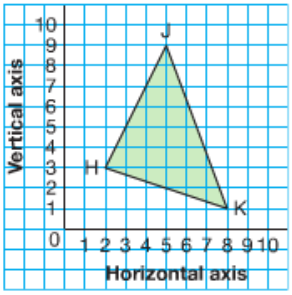
What shape did this make?

Triangle

## Practice

1. Write the coordinates of the vertices of each shape.

a)

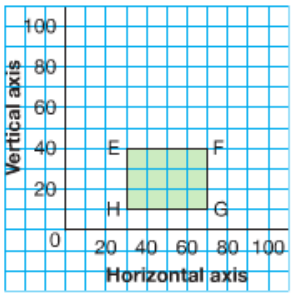



H(2, 3)

J(5,9)

K(8,1)

b)



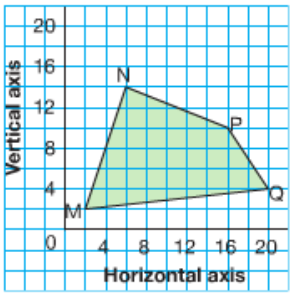

E(30,40)

F(70,40)

G(70,10)

H(30,10)

c)



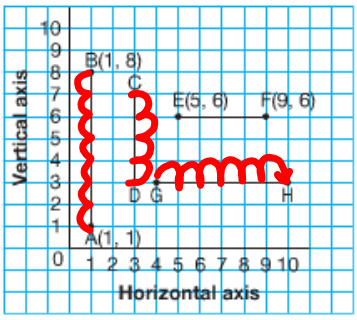

M(2,2)

N(6,14)

P(16,10)

Q(20,4)

2. Find the length of each line segment on this coordinate grid.
Describe the strategy you used.




7 Jumps of size 1

AB is 7 units (I counted the vertical blocks)

7 x 1 = 7 units

or

Given the coordinates I took the y value and subtracted 8-1 = 7 units

4 Jumps of size 1

CD is 4 units (I counted the vertical blocks)

4 x 1 = 4

EF is 4 units (I counted the horizontal blocks)

or

Given the coordinates I took the x value and subtracted 9-5 =4 units

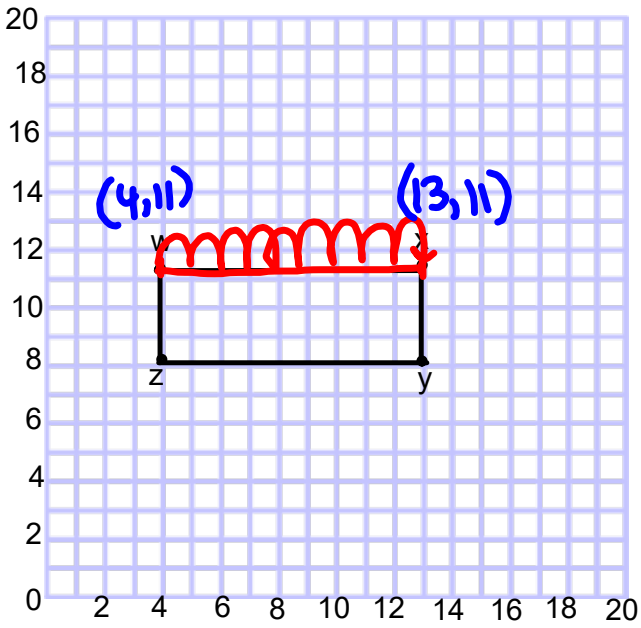
GH is 6 units (I counted the horizontal blocks)

6 Jumps of size 1 unit

6 x 1 unit

6 units.

What is the length of the line segment WX




9 Jumps of 1 unit
9 x 1 unit
9 units

What strategy did you use?

Strat 2 (4,11), (13,11)

13 − 4 = 9 units

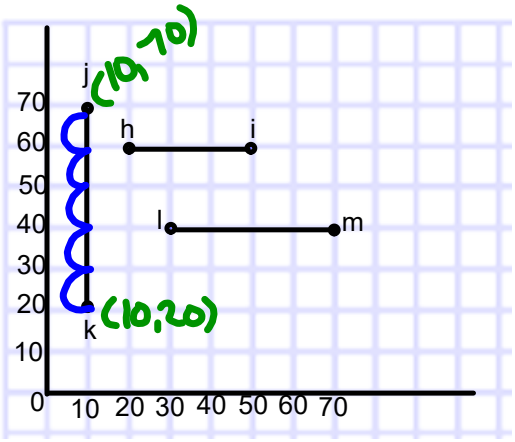
Find the following lengths JK, and LM What strategy did you use?

JK Strat 1)

5 jumps of size 10 units

5 X 10 units

JK = 50 units




Strat 2

(10,20) (10,70)

70 - 20 = 50 units

LM Strat 1

4 jumps of size 10 unit

4 x 10 units

LM = 40 units

Strat 2)

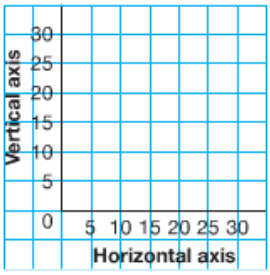
(30,40) (70,40)

LM = 70 - 30 = 40 units


page 293-294 #3, #4, #6, #8, #9

Do on grid paper

3. Copy this grid.
   a) Plot each point on the grid.
      A(10, 5) B(5, 15) C(10, 25)
      D(20, 25) E(25, 15) F(20, 5)
   b) Join the points in order. Then join F to A.
   c) Describe the shape you have drawn.



4. Draw and label a coordinate grid.
   a) Plot each point on the grid.
   What scale will you use? Explain your choice.

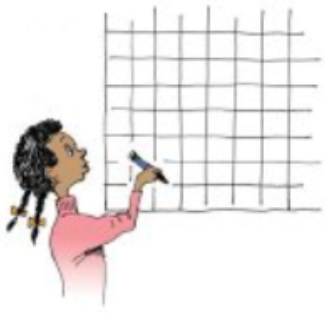
   J(4, 2)  K(4, 10)  L(10, 12)  M(10, 4)

   b) Join the points in order. Then join M to J.
   Describe the shape you have drawn.

5. Draw a shape on a coordinate grid.
   Each vertex should be at a point where grid lines meet.
   List the vertices of the shape, in order.
   Trade lists with a classmate. Use the list to draw your classmate's shape.

6. Draw and label a coordinate grid.
   a) Plot each point on the grid.
   What scale will you use?
   Explain your choice.
   A(10, 30) B(35, 30) C(35, 15) D(10, 15)
   b) Join the points in order. Then join D to A.
   Describe the shape you have drawn.
   c) Find the length of each side of the shape.
   Show your work.

7. Draw and label a coordinate grid.
   a) Plot the points A(5, 1) and B(5, 5).
      Join the points.
   b) Find point C so that △ABC is isosceles.
      How many different ways can you do this?
      Draw each way you find.
      Write the coordinates of C.
      How do you know each triangle is isosceles?
   c) Find point D so that △ABD is scalene.
      Show 3 different scalene triangles.
      Write the coordinates of D.
      How do you know each triangle is scalene?



8. Draw and label a coordinate grid.
   a) Plot these points: E(5, 1), F(3, 3), G(5, 6)
   b) Find the coordinates of Point H that forms Kite EFGH.
   Explain the strategy you used.

9. The points A(10, 8) and B(16, 8) are two vertices of a square. Plot these points on a coordinate grid.
   a) What are the coordinates of the other two vertices? Find as many different answers as you can.
   b) What is the side length of each square you drew?