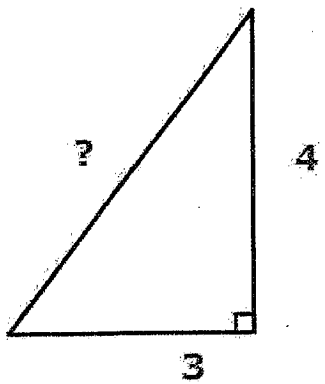
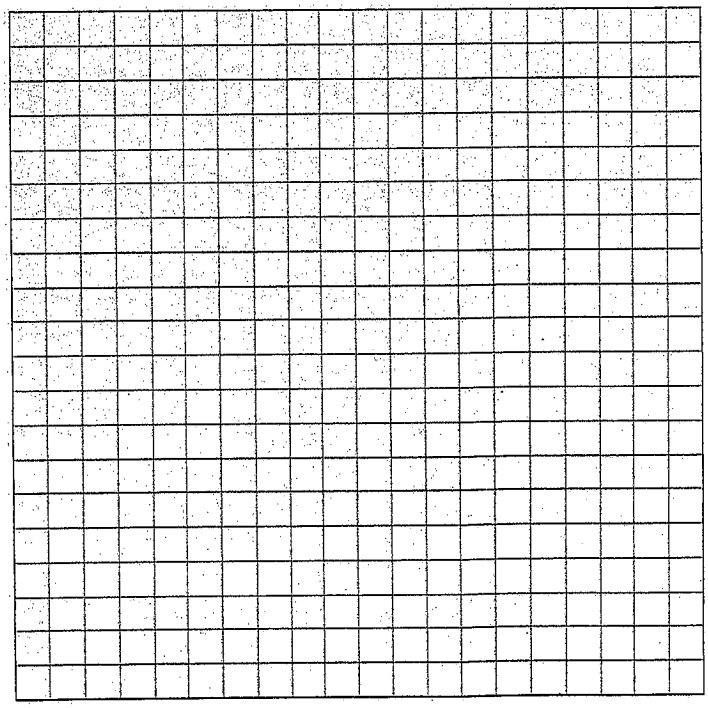
Warm Up →
What is the value of c?



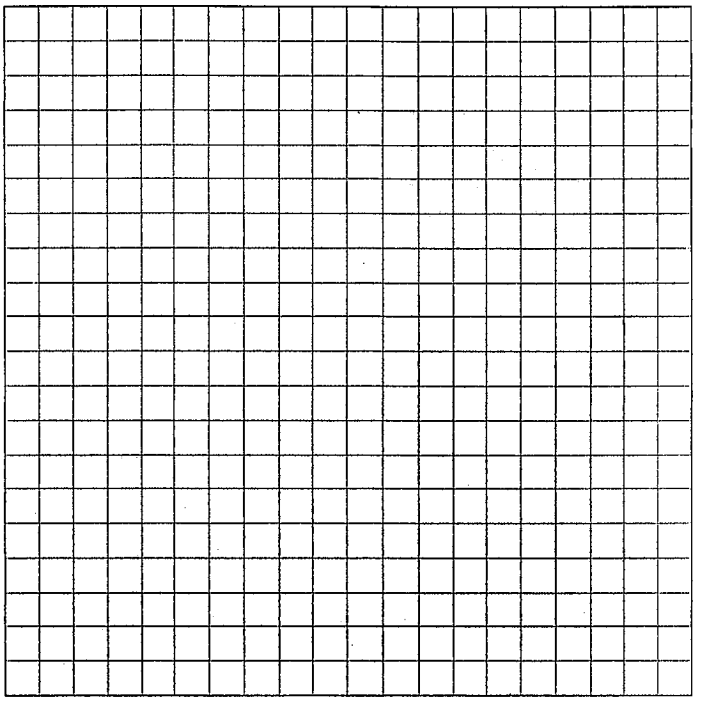
Model Problem 1

Find the length of AC given A(2 , 3) and C(5, 7).



Model Problem 2

Find the length of AB given A(3, -4) and B(-2, 3).



I. Practice Problems

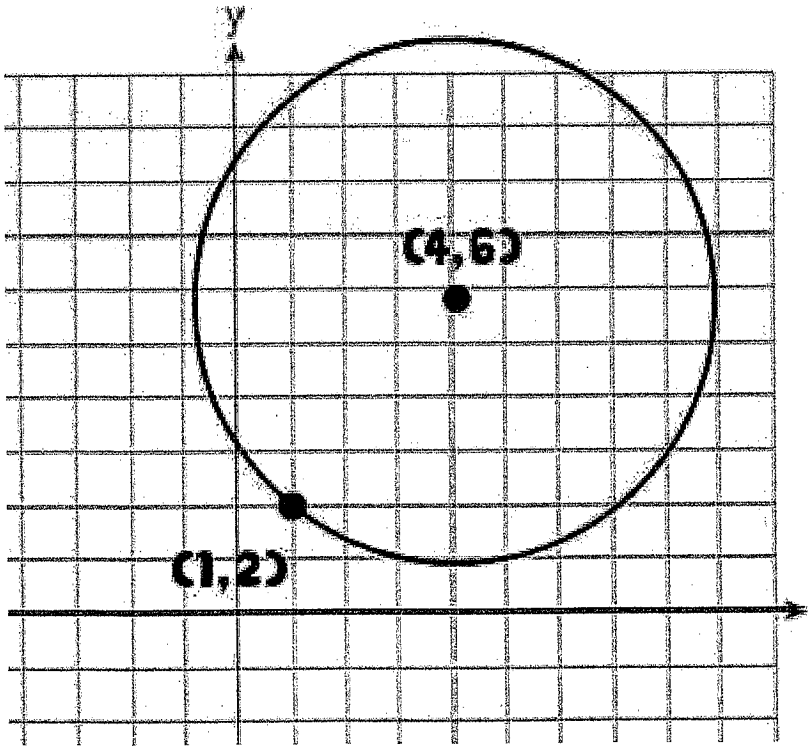
1) Find the distance between the points (1 , 3) and (6, 15).

2) Find the distance between the points (-4,-5) and (1,-2).

3) What is the distance between points A(-6,3) and B(6,8)?

Think pair share

How can you use the distance formula to solve problems like the following one:
The point (1,2) lies on a circle. What is the length of the radius of this circle if the center is located at (4,6)?



Part II.

1) The point (5,4) lies on a circle. What is the length of the radius of this circle if the center is located at (3,2)?

2) The point (-2,-1) lies on a circle. What is the length of the radius of this circle if the center is located at (0, 4)?

3) The point (4 ,5) lies on a circle. What is the **diameter** of this circle if the center is located at (7, 9)?

III. Mixed Problems

1) What is the distance between points c(-2,3) and D(0,5)?

2) What is the distance between points A(-4,5) and B(-2,5)?

3) The point (1 ,2) lies on a circle. What is the **diameter** of this circle if the center is located at (7, 10)?