Distance Formula Practice

Find the distance between each point using the distance formula. $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

1) (-1 , 2) and (2 , -4)   6.7

2) (4 , 3) and   (-3 , 4) 1.41

3) (0 , 4) and (2, 3)   2.24

4) (4 , 0) and (-4 , 1) 8.06

5. Plot and label each point on the following coordinate system: A(6, 3); B(14, 9); C(8,17); D(0, 11). Connect the points in the same order as in the first drawing. What type of quadrilateral does this appear to be? square

6. Find the **distance AND slope** of each side.
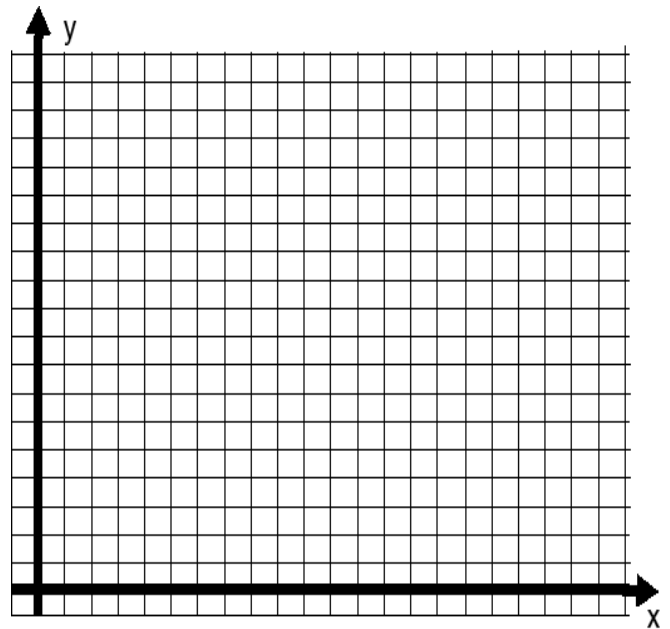
AB   slope:_____3/4_____

distance: _____10_____

BC   slope: _____-4/3_____

distance: _____10_____

CD   slope: ___3/4_____

distance: _____10_____

DA   slope: _____-4/3_____

distance: _____10_____

7. Do the results confirm your answer to question 5? Explain why or why not. Yes. All sides are the same

8. Draw the diagonals. Use the slope formula to find the slope of each diagonal. 7 and -1/7

9. What do you think is true about the diagonals of this quadrilateral? Update your checklist. Same length