1.Given Quadrilateral ABCD has the following vertices:

$A(4,8)\ B(5,1)\ C(0,-4)\ D(-1,3)$

Use the distance formula to find the length of all four sides:

$AB =$ $BC =$ $CD =$ $DE =$

What kind of quadrilateral is this?

2. Is each biconditional true? If not, explain why.

a) Two lines are perpendicular if and only if they intersect.

b) An angle is a straight angle if and only if it has a measure of $180°$.

3. Use this true statement: If two lines are parallel, then they have the same slope.

a. Write the converse of this statement.

b. Is the converse true? If no, give a counterexample

If yes, write the biconditional formed by the original conditional and its converse.

4. Use this true statement: If a number is odd, then both of its factors are odd.

a. Write the converse of this statement.

b. Is the converse true? If no, give a counterexample

If yes, write the biconditional formed by the original conditional and its converse.