

Name _____

8A; Algebra 1

Date _____

Period _____

Homework

1) Using the given coordinates of A, B, C, and D, use the slope to determine whether or not $\overline{AB} \parallel \overline{CD}$.
A(-1,5), B(1,1), C(1,2), D(3,-2)

2) Using the given coordinates of A, B, C, and D, use the slope to determine whether or not $\overline{AB} \perp \overline{CD}$.
A(1,-5), B(1,3), C(2,6), D(-4,6)

3) A parallelogram is a quadrilateral with two pairs of parallel sides. Show that ABCD is a parallelogram if the coordinates of the vertices are A(-2, 3), B(2,7), C(8,5), and D(4,1).

4) A rectangle is a quadrilateral with four right angles. Show that EFGH is a rectangle if the coordinates of the vertices are E(-3,-5), F(3, -1), G(1,2), and H(-5,-2).

5) (a) What is the slope of a line that is perpendicular to a line whose slope is 0? Explain your answer.

(b) What is the slope of a line that is perpendicular to a line that has no slope?

In 6- 14: (a) What is the slope of a line that is parallel to each line whose equation is given?

(b) What is the slope of a line that is perpendicular to each line whose equation is given?

6) $y = 2x + 6$

7) $y = x - 2$

8) $y = -3x + 7$

9) $3y = x$

10) $x - y = 4$

11) $2x - 3y = 6$

12) $x = 2y - 1$

13) $x = 4$

14) $y = -5$