Fundamentals 2 Unit 2 Writing Equations of Lines
Part 2 Test
Name: _____ **Date:** _____

Standard 15: Determine if lines are parallel, perpendicular, or neither.

    a. Given two sets of points

Is the line containing the points (-1, -2) and (1, 2) parallel, perpendicular, or neither to the line containing the points (-2, 0) and (0, 4)?

Is the line containing the points (3, 9) and (2, 7) parallel, perpendicular, or neither to the line containing the points (-3, 4) and (4, 6)?

Is the line containing the points (0, 4) and (-1, -7) parallel, perpendicular, or neither to the line containing the points (3,0) and (-3, 2)?

    b. Given two equations in slope- intercept form

Is the line $y = 4x + 12$ parallel, perpendicular, or neither to the line $y = -4x - 5$?

Is the line $y = 6x + 1$ parallel, perpendicular, or neither to the line $y = -1/6x + 9$?

Is the line $y = -1/2x + 82$ parallel, perpendicular, or neither to the line $y = -1/2x + 7$?

    c. Given two equations in point- slope form

Is the line $y - 7 = 5(x + 4)$ parallel, perpendicular or neither to the line $y - 4 = 1/5(x + 2)$?

Is the line $y - 2 = 3(x - 8)$ parallel, perpendicular or neither to the line $y - 12 = 3(x + 3)$?

Is the line $y - 5 = 9(x + 0)$ parallel, perpendicular or neither to the line $y - 2 = -9(x + 6)$?

    d. Given two equations in standard form

Is the line $4x - 6y = 23$ parallel, perpendicular, or neither to the line $8x - 12y = 30$?

Is the line $7x - 6y = 23$ parallel, perpendicular, or neither to the line $6x + 7y = 30$?

Is the line $5x - 8y = 23$ parallel, perpendicular, or neither to the line $1x - 6y = 30$?

Standard 16: Write equations of parallel and perpendicular lines.

    a. In slope- intercept form

Write the equation of the line PARALLEL to the line $y = 4x - 4$ and goes through the point (6, 12).

Write the equation of the line PERPENDICULAR to the line $y = -6x + 4$ and goes through the point (0, 3)

b. In point- slope form

Write the equation of the line PARALLEL to the line $y - 3 = 8(x + 9)$ that goes through the point (-1, -3)

Write the equation of the line PERPENDICULAR to the line $y + 4 = 1/4(x - 7)$ that goes through the point (2, -5)

Standard 17: Create a scatter plot and create a line of best fit for that line.

Given the table of values to the right, showing math versus reading scores for 6th graders, plot each of the given points and draw the line of best fit for the data.
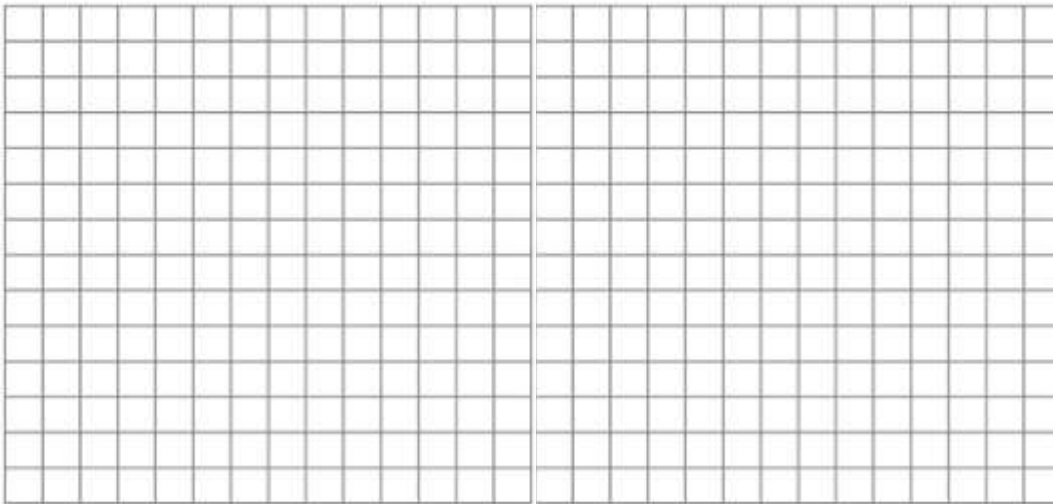
Math	Reading
32	38
40	39
50	55
48	48
39	46
45	50
42	45
40	47

Standard 18: Perform linear regression on a set of data points.

Use the given table of values above to create the linear regression line which best fits the data above. (LinReg)

What type of correlation does this graph have? (strong positive, weak positive, no correlation, strong negative, weak negative, curvilinear)