

Date:

Title:

(A) **Fast Five**

Recall that one of our key ideas in the definition of mathematics was “interrelationships between numbers” → so to investigate “interrelationships”, graph the following data sets on the grids provided:

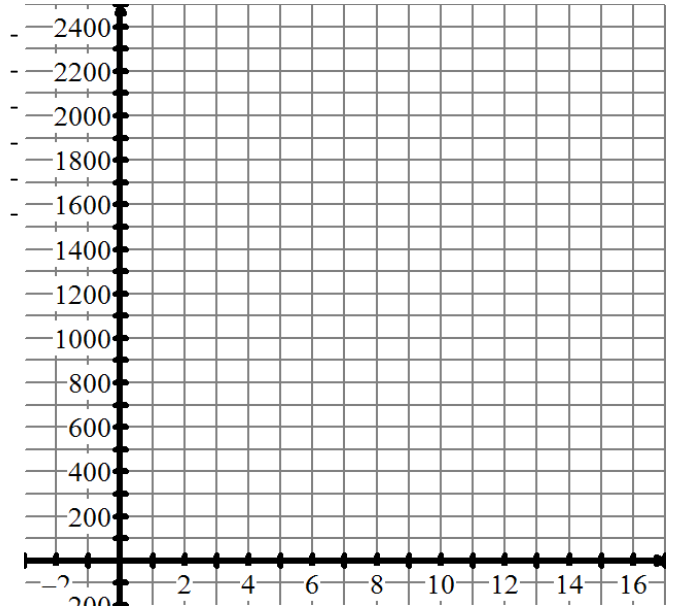
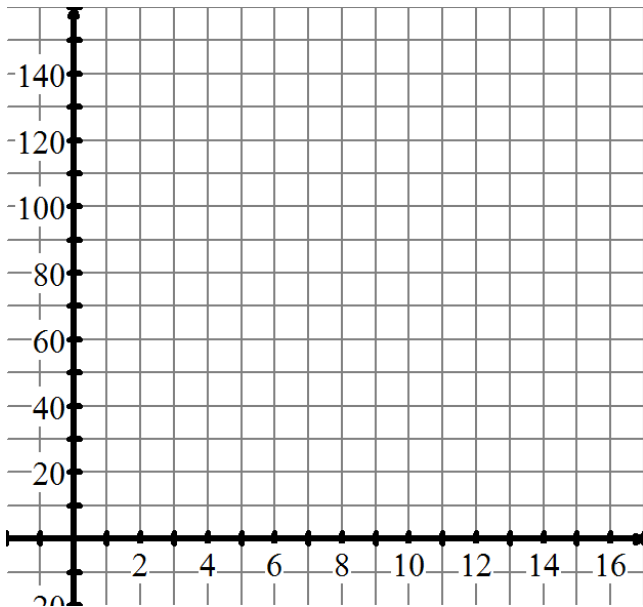
(A) Wages

Time Worked (h)	Pay for Mr S. (\$)	Pay for Mrs S. (\$)
0	0.00	0.00
2	15.00	20.00
4	30.00	40.00
6	60.00	70.00
11	82.50	110.00
15	112.50	150.00

(B) Club Memberships

Number of Visits	Rockwell Club (php)	Metropolitan Club (php)
0	200	0
2	440	300
4	680	600
6	920	900
11	1520	1650
15	2000	2250

- (a) What patterns do you observe in the data set PRIOR to graphing?



(b) What patterns do you observe in the GRAPH of the data set?

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(B) Explorations/Development

Now let's generate our own data → let's investigate the relationship between the distance walked along a stair/hallway and the time taken to travel these distances.

- KEY INSTRUCTION → WALK AT A STEADY PACE THROUGHOUT THE ACTIVITY

(1) SLOW PACE

Time (sec)						
Distance (m)						

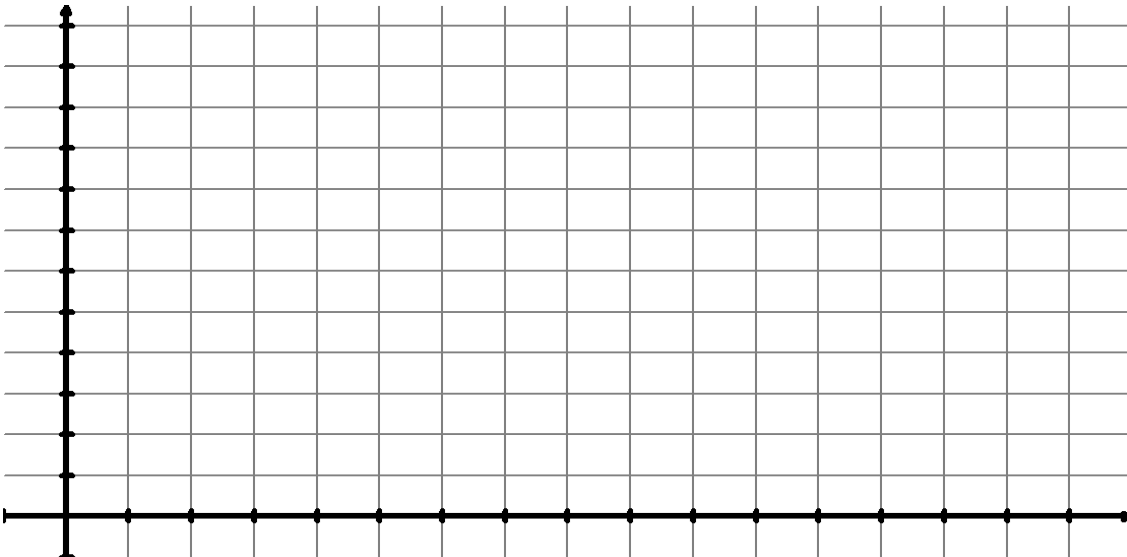
(2) MODERATE PACE

Time (sec)						
Distance (m)						

(3) FAST PACE

Time (sec)						
Distance (m)						

- (a) What patterns do you observe in the data set PRIOR to graphing?



- (b) What patterns do you observe in the GRAPH of the data set?
- (c) Mathematicians use the word SLOPE when describing data and graphs that show a linear pattern (a linear equation). From this activity, what do you think slope might mean?

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(C) **Classwork**

- Go to the link from The Algebra Project →
<http://www.teacherweb.com/NY/Arlington/AlgebraProject/L8RearrangingFormulasLiteralEquations.pdf>

(D) **Homework/Resources**

- HOMEWORK:

- Practice from AlgebraLab: http://www.algebralab.org/practice/practice.aspx?file=Algebra1_3-6.xml
- Help from PurpleMath: <http://www.purplemath.com/modules/solveit.htm>
- Practice from AnalyzeMath: http://www.analyze-math.com/Equations/literal_equations.html