Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ November 17, 2017

Mrs. Losquadro Math 8

**Writing Linear Equations Word Problems**

 1) Jackson's birthday party costs $15, plus an additional $3 for each guest he invites.

Write an equation to represent Jackson's birthday party so that you could figure out how much it would cost for any number of guests. Graph your equation.

Based on your graph, Determine how much it would cost for Jackson’s Birthday if he invites 10 guests.

2) Speedy Boat Rental charges a $15 deposit fee plus $2 for each hour of use to rent a paddleboat. What is an equation that can be used to represent C, the total cost to rent the boat, for h hours? Using your graph, how many hours did someone rent a paddleboat if there total bill is $25?



3) You buy $35 of supplies for a carwash fundraiser. Write and Graph an equation can be used to show the relationship of the amount of profit you make if you charge $6 per car?

Based on your graph, how much will you earn if you wash 10 cars?



4) Tammy has already read 6 books and she reads 4 books each month as part of her book club. After belonging to the book club for 7 months, how many books will Tammy have read in all? Write an equation and graph your linear function to justify your answer.



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Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 8

**Writing & Graphing Real World Applications – Homework**

**1)** Create an equation then graph to show the relationship described below.

Determine the amount of money that you spend if a gym membership costs $20 each month and an additional $4 per spin class.

Based on your graph, how much would you spend in a month you took 8 spin classes?



**2)** On the windowsill is a plant that is 15 inches tall. It is growing 2 inch per week. Write and graph an equation illustrating the plant growth.

Based on your graph, how tall will the plants be after 5 weeks?

