

NAME \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

# Section 4.6

## ALGEBRA

### Writing Equations from a Story: Practice B

- 1) Sam runs 8 miles before school everyday to train for the big track meet. After school, he also runs at rate of 3 miles per hour. Which function below represents that total miles that Sam runs?

(a)  $f(x) = 3x + 8$

(b)  $f(x) = 3x - 8$

(c)  $f(x) = 8x - 3$

(d)  $f(x) = 8x + 3$

#### \*\*\* Tips for Success \*\*\*

Circle and underline important words. Look for the slope by looking for those important key words we have above. WRITE DOWN the m & b!!

$$m = \underline{\hspace{2cm}} \quad b = \underline{\hspace{2cm}}$$

- 2) Tim earns \$10 an hour working at McDonald's. He also was given a signing bonus when he started of \$30. Which equation below represents Tim's money.

a)  $f(x) = 10x + 30$

b)  $f(x) = 10x - 30$

c)  $f(x) = 30x - 10$

d)  $f(x) = 30x + 10$

- 3) The table below represents the cost of renting a movie for  $x$  amount of days. Chose which equation matches the table.

Days Rented, $x$	3	6	9	12	15
Cost to Rent, $y$	22	31	40	49	58

STAT → 1: Edit → Enter the Values → STAT → Push  for CALC → 4: LinReg(ax+b) → Enter

a)  $y = 22x + 3$

b)  $y = 3x + 13$

c)  $y = 6x + 31$

d)  $y = 9x + 3$

4) The table below shows the cost of mailing a letter based on the weight

Ounces of the Package, $x$	8	12	16	20	24
Cost to Mail it, $y$	\$1.50	\$2.00	\$2.50	\$3.00	\$3.50

a) Write the equation for the table:

5) Jane works as a waitress at the local Diner. Jane is paid a flat rate of \$11 on the days she works. In addition to her flat rate, she also earns \$3 per hour in tips. Write an equation that represents the amount of money ( $y$ ) that Jane makes, for working  $x$  hours.

6) Joey goes to the amusement to ride as many rides as he can. Each ride costs \$5. In addition to paying for each ride, Joey must also pay admission into the park, which costs \$12. Which equation below represents the amount of money Joey will spend to ride  $x$  rides?

a)  $f(x) = 12x + 5$       b)  $f(x) = 12x - 5$       c)  $f(x) = 5x + 12$       d)  $f(x) = 5x - 12$

7) Fun Times Music is offering a big promotional sale. The store is selling a grocery bag for \$20 – but once you have the bag, any CD that you put into the bag will only cost you \$1 more. What a deal! Which equation below represents the cost of buying  $x$  CD's?

a)  $f(x) = 20x - 1$       b)  $f(x) = x - 20$       c)  $f(x) = x + 20$       d)  $f(x) = 20x + 1$