Function Notation and Evaluation

Homework

Name Key

Date _____ Period _____

1. If $f(x) = 4x - 7$ and $g(x) = -3x + 5$, find each value.(use calculator to evaluate)

a. $f(3) = 4(3) - 7$

$f(3) = 5$

b. $g(-2) = -3(-2) + 5$

$g(-2) = +11$

c. $f(2.8) = 4(2.8) - 7$

$f(2.8) = 4.2$

d. $g(-3.2) = -3(-3.2) + 5$

$g(-3.2) = 14.6$

g. $f(-\frac{3}{4}) = 4(-\frac{3}{4}) - 7$

$f(-\frac{3}{4}) = -10$

h. $g(\frac{5}{9}) = -3(\frac{5}{9}) + 5$

$g(\frac{5}{9}) = \frac{10}{3}$

2. Katy has $800 in her bank account and spends $70 every month out of her savings on groceries.

Initial Amount ± Rate per _____	Function Rule	Evaluate
$y = 800 - 70 \cdot x$ f: $ left in savings account x: # of months	$f(x) = 800 - 70x$	*How much money would she have left in her bank account after 7 months?* $f(7) = 800 - 70(7)$ $f(7) = \$310$

3. U-haul charges $20 a day plus $0.35 per mile to rent a moving truck.

Initial Amount ± Rate per _____	Function Rule	Evaluate
$y = 20 + 0.35 \cdot m$ C: total cost m: miles	$C(m) = 20 + 0.35m$	*How much U-haul charge if you drove the truck for 50 miles and returned it after one day?* $C(50) = 20 + 0.35(50)$ $C(50) = \$37.50$

4. The Titl-A-Whirl ride at the carnival takes 8 tickets.

Initial Amount ± Rate per _____	Function Rule	Evaluate
$y = \_\_\_ \pm 8 \cdot r$ T: total tickets r: # of rides	$T(r) = 8r$	*How many tickets if Sue and her 3 friends want to ride?* $T(4) = 8(4)$ $T(4) = 32$ tickets