Practice U1B L1 Function Notation Name: _____HR:_____

UNIT 1B
Lesson 1

Evaluate the following. SHOW THE SUBSTITUTION and USE PROPER NOTATION

1. Given $p(x) = 4x + 2$, find $p(5)$.	2. Given $q(x) = 6 - 3x$, find $q(3)$.	3. Given $r(x) = \frac{x}{4} - 6$, find $r(8)$.
4. Given $s(x) = 4 - 7x$, find $s(-2)$.	5. Given $t(x) = 3\|x\| + 2$, find $t(-5)$.	6. Given $u(x) = \frac{3x+1}{2}$, find $u(9)$.
7. Given $v(x) = x^2 + 3$, find $v(5)$.	8. Given $w(x) = 2 - \frac{x}{3}$, find $w(6)$.	9. Given $y(x) = -x^2 + 4x + 1$, find $y(2)$.
10. Given $p(x) = 4x + 2$, find $p(b + 3)$.	11. Given $q(x) = 6 - 3x$, find $q(2d)$.	12. Given $s(x) = 4 - 7x$, find $s(m + 2)$.

13. $f(x) = 3x - 8$, find $f(x + 4)$	14. $g(x) = 3\|x - 4\| + 2$, find the $g(x + 5)$	15. $h(x) = 5x - 6$, find the $h(3x)$
16. $f(x) = x^2 - 5$, find $f(x + 3)$	17. $f(x) = -2x + 6$, find the $f(4x + 1)$	18. $f(x) = -\|3x\| + 8$, find the $f(x + 4)$

Given the scenario, write the function. If what the variable represents is not filled in, then determine what the variable represents. Evaluate the function at the given value.

19. A ride-share service charges a flat pick-up fee of \$3 plus \$1.50 per mile driven. m = number of miles driven C = amount charged $C(m) =$ $C(20)$ =	20. A mobile carrier charges a monthly base fee of \$40 plus \$0.10 for each text message sent over the limit. t = number of texts over limit C = amount charged $C(t) =$ $C(500)$ =	21. An intern earns \$15 per hour at a local shop and receives a \$50 sign-on bonus on their first day. h = number of hours worked P = pay $P(h) =$ $P(40)$
22. A used lawnmower is bought for \$300 and loses an estimated \$25 in value each year. $y =$ $V =$ $V(y) =$ $V(10) =$	23. A swimming pool already has 1,000 gallons of water in it and fills at a rate of 40 gallons per minute. $m =$ $G =$ $G(m) =$ $F(25)$ =	24. A local gym charges a one-time enrollment fee of \$75 and a recurring fee of \$30 per month. $m =$ $C =$ $C(m) =$ $C(12)$