

## Evaluating Algebraic Expressions

Directions: Copy each problem on notebook paper. Use pencil and write only on the front of each page. Show all steps and attach your paper to the back of the worksheet.

1.  $2ab$ , when  $a = -4$  and  $b = 5$

11.  $F = \frac{9}{5}C + 32$ , for  $C = 30^\circ$

2.  $(X + Y)^2$ , when  $X = -4$  and  $Y = -3$

12.  $x(y - 3)$ , when  $x = 2$  and  $y = 5$

3.  $-x^2$ , when  $x = -5$

13.  $\frac{5}{y^2} + 8x$ , when  $x = -2$  and  $y = -10$

4.  $(-z)^2 + 4$ , when  $z = 6$

14.  $\frac{8}{x - y}$ , when  $x = -5$  and  $y = -2$

5.  $y - z$ , when  $y = -3$  and  $z = -5$

15.  $\frac{x + y}{5}$ , when  $x = 10$  and  $y = 15$

6.  $x(y - 1)$ , when  $x = 6$  and  $y = -5$

16.  $7(x - y)$ , when  $x = 8$  and  $y = 2$

7.  $a(x - y)$ , when  $a = -3$ ,  $x = -6$   
and  $y = 2$

17.  $x(2y - x)$ , when  $x = 3$  and  $y = 5$

8.  $x^2 - y$ , when  $x = -1$  and  $y = -3$

18.  $\frac{x - y}{3}$ , when  $x = -12$  and  $y = 6$

9.  $(x^2)(y^3)$ , when  $x = -1$  and  $y = -3$

19.  $9(x + y)$ , when  $x = 5$  and  $y = 7$

10.  $x + y^2 - z$ , when  $x = 3$ ,  $y = -4$   
and  $z = -2$

20.  $P = 2L + 2W$ , for  $L = 4$  ft. and  
 $W = 3$  ft.