## Homework: Variables and Expressions

I. Indicate with math symbols what operations are being described by the given word(s). Use + , -, x, or $\div$ symbols.

1. sum $\qquad$
2. quotient $\qquad$
3. product $\qquad$ 3. decreased by $\qquad$
4. difference $\qquad$
5. more than $\qquad$ 8. less than $\qquad$ 9. twice something $\qquad$
II. Write a verbal expression for the algebraic expression.
6. $a b$
7. $x+7$
8. $2 x$
9. $m^{3}$
10. $x-6$
11. $8 y^{2}$
12. $\frac{x}{y}$
13. $1 / 2(x+y)$
14. $3 x-4$
15. $5(a-b)$
III. Write an algebraic expression to the given verbal expression.
16. eight less than a number
17. a number increased by seven
18. the quotient of $m$ and $n$
19. a number squared
20. nine times a number
21. a number decreased by three
22. seven more than the cube of a number
23. one-half the product of $x$ and $y$
24. the product of twice $a$ and $b$
25. twice the product of $a$ and $b$
26. two less than five times a number
27. the sum of 3 times $a$ and $b$
28. the cube of $a$ plus $b$
29. twice a number increased by three times the number
30. three times the sum of $a$ and $b$
31. the cube of the sum of $a$ and $b$
